

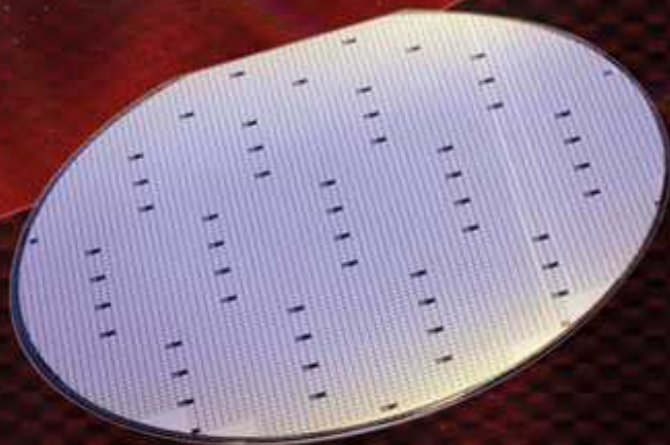
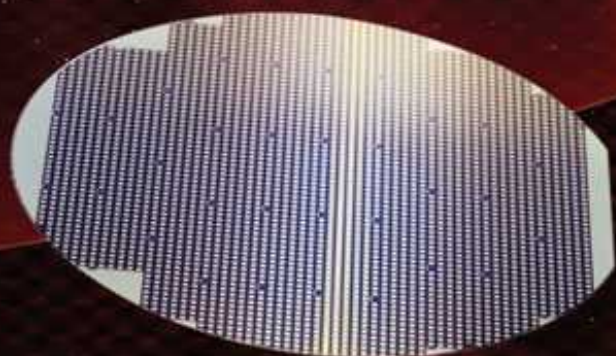
SMC

DIODE SOLUTIONS

15 YEARS OF EXCELLENCE

SANGDEST MICROELECTRONICS (NANJING) CO., LTD

CHIP SELECTOR GUIDE





Company Profile:

Sangdest Microelectronics (Nanjing) Co., Ltd (SMC) was founded in 1997. Our headquarters is located in New York, USA. We combine first class USA quality design with low-cost Asia manufacturing.

Our products are present where high reliability is demanded: in the consumer electronics and the renewable energy markets as well as in aerospace technologies and medical applications. They make their highly dependable contribution in LCD displays, communications equipment, solar panels and wind turbines, power supplies and aircrafts.

Our products are widely accepted in both domestic and international markets, as demonstrated in robust sales. These follow rigorous qualification exams from our customers that are known worldwide for both their superior products and for their exceptionally demanding supplier qualification teams.

Our staff is dedicated to consistently meeting its customer's expectations, to offer prompt technical support and to deliver high quality products with on-time delivery. Please challenge our team to meet your special requirements.

Company contact information:

Website:

www.smc-diodes.com

Headquarters & North America Sales Office

101 Sunnyside Blvd,
Plainview, NY 11803, USA
sales-usa@smc-diodes.com
Phone: +1 631 742 1771
Fax: +1 720 294 6451

Factory & China Sales Office

19 WeiQi Street, Airport Development Zone,
JiangNing District, Nanjing, 211113, China
sales@smc-diodes.com
Tel: +86 25 87123907
Fax: +86 25 87123900

Korea Sales Office

513 Pan-Gyo Woo-Lim W-City
Sam Pyeong Dong 618, Sung-Nam Si,
Kyung-gi do, Korea
sales-korea@smc-diodes.com
Tel: +82-031-628-7840
Fax: +82-031-628-7841

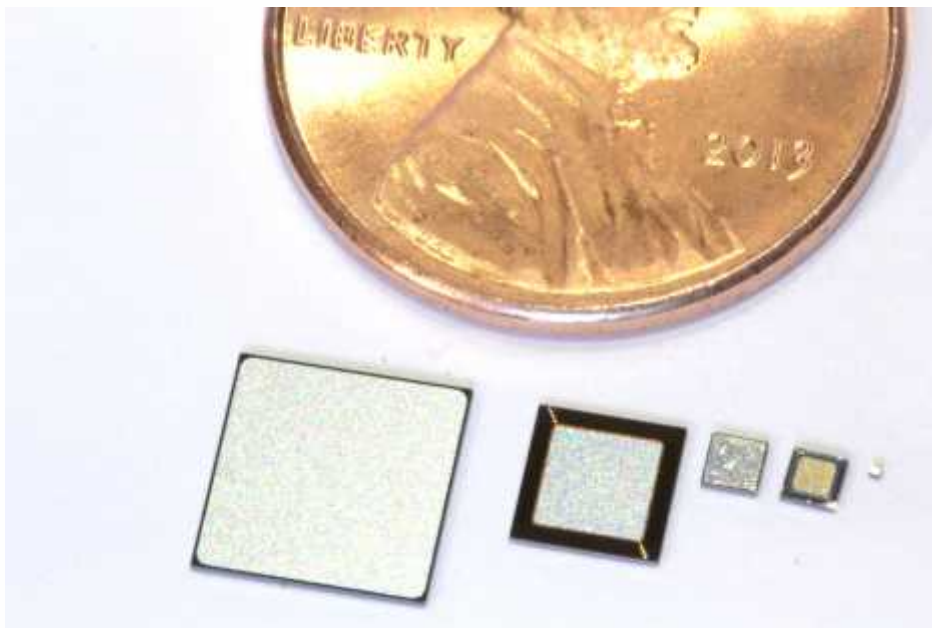
European Sales Office

Obere Tiefenbachstr. 8
83734 Hausham, Germany
sales-europe@smc-diodes.com
Tel: +49 8026 9206021
Fax: +49 3221108990470

Table of contents



Transient Voltage Suppressor (TVS) – Planar	5
Transient Voltage Suppressor (TVS) – Mesa	6
Zener – Planar	18
Schottky – Planar	20
Schottky – Ultra Low Vf Trench	30
Ultrafast-Mesa	32
Ultrafast-Planar	34



Notes

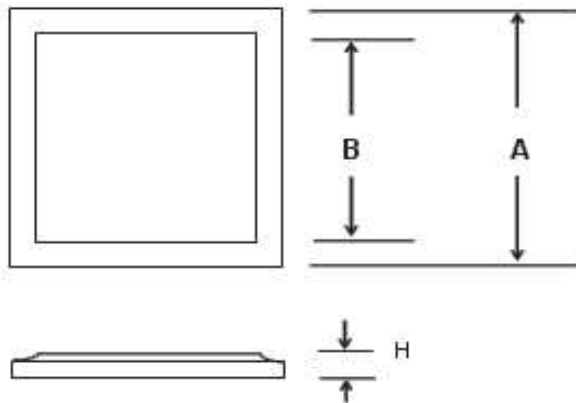


A large, empty rectangular box with a black border, intended for handwritten notes or additional information.

Catalog P/N	Power Rating (Pd) [W] (8 x 20 μs)	Size [mil]	Max Stand-off Voltage VWM [V}	Breakdown Voltage VBR @ IBR Min [V]	Test Current IBR [mA]	Max Clamping Voltage Vc(max) @ Ip tp=1ms [V]	Max Peak Pulse Current Ip [A]	Max Reverse Current IR1 @ VRWM [μA]
SZ05300R	300	23	5	6	1	9.8	1	20
SZ12300R	300	23	12	13.3	1	19	1	1
SZ15300R	300	23	15	16.7	1	24	1	1
SZ24300R	300	23	24	26.7	1	43	1	1
SZ05500R	500	32	5	6.1	1	9.8	1	12
SZ12500R	500	32	12	13.3	1	19	1	0.6
SZ15500R	500	32	15	16.7	1	24	1	1
SZ24500R	500	32	24	26.7	1	43	1	1

Note: SZXXXXXR: SZ is TVS chip, is stand-off voltage, XXX is chip power, R means Bottom side is cathode, top side is anode. No R means Bottom side is anode, top side is cathode.

Chip Mechanical Dimensions: In mil(mm)



Bottom side metallization is Ag: Thickness 5 KÅ minimum.
 Top side metallization is Al: Thickness 25 KA minimum.

Chip Size	A	B	H
mil	mil	mil	mil
23	21 ± 2	15 ± 2	8.5 ± 1
32	30 ± 2	25 ± 2	8.5 ± 1

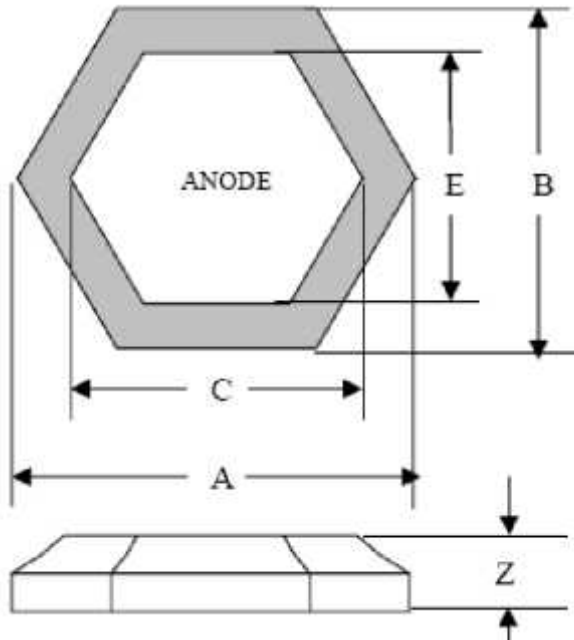
Catalog P/N	Breakdown Voltage VBR @ IBR Min	Test Current IBR	Working Peak Reverse Voltage VRWM	Max Reverse Current IR @VRWM	Max Clamping Voltage Vc(max) @Ip tp=1ms	Max Peak Pulse Current Ip	Max Temp Coeff of IR1 VBR α VBR
500W 10x1000 μs	V	mA	V	μA	V	A	%/°C
1C6105	8.19	150	6.9	20	14	35.7	0.06
1C6105A	8.65	150	6.9	20	13.4	37.3	0.06
1C6106	9	125	7.6	20	15.2	32.9	0.07
1C6106A	9.5	125	7.6	20	14.5	34.5	0.07
1C6107	9.9	125	8.4	20	16.3	30.7	0.07
1C6107A	10.45	125	8.4	20	15.6	32.0	0.07
1C6108	10.8	100	9.1	20	17.7	28.2	0.07
1C6108A	11.4	100	9.1	20	16.9	29.6	0.07
1C6109	11.7	100	9.9	20	19	26.3	0.08
1C6109A	12.35	100	9.9	20	18.2	27.5	0.08
1C6110	13.5	75	11.4	20	21.9	22.8	0.08
1C6110A	14.25	75	11.4	20	21	23.8	0.08
1C6111	14.4	75	12.2	20	23.4	21.4	0.08
1C6111A	15.2	75	12.2	20	22.3	22.4	0.08
1C6112	16.2	65	13.7	1	26.3	19.0	0.085
1C6112A	17.1	65	13.7	1	25.1	19.9	0.085
1C6113	18	65	15.2	1	29	17.2	0.085
1C6113A	19	65	15.2	1	27.7	18.0	0.085
1C6114	19.8	50	16.7	1	31.9	15.7	0.085
1C6114A	20.9	50	16.7	1	30.5	16.4	0.085
1C6115	21.6	50	18.2	1	34.8	14.4	0.09
1C6115A	22.8	50	18.2	1	33.3	15.0	0.09
1C6116	24.3	50	20.6	1	39.2	12.8	0.09
1C6116A	25.7	50	20.6	1	37.4	13.4	0.09
1C6117	27	40	22.8	1	43.6	11.5	0.09
1C6117A	28.5	40	22.8	1	41.6	12.0	0.09
1C6118	29.7	40	25.1	1	47.9	10.4	0.095
1C6118A	31.4	40	25.1	1	45.7	10.9	0.095
1C6119	32.4	30	27.4	1	52.3	9.6	0.095
1C6119A	34.2	30	27.4	1	49.9	10.0	0.095
1C6120	35.1	30	29.7	1	56.2	8.9	0.095
1C6120A	37.1	30	29.7	1	53.6	9.3	0.095
1C6121	38.7	30	32.7	1	62	8.1	0.095
1C6121A	40.9	30	32.7	1	59.1	8.5	0.095

Catalog P/N	Breakdown Voltage VBR @ IBR Min	Test Current IBR	Working Peak Reverse Voltage VRWM	Max Reverse Current IR @VRWM	Max Clamping Voltage Vc(max) @Ip tp=1ms	Max Peak Pulse Current Ip	Max Temp Coeff of IR1 VBR α VBR
500W 10x1000 μs	V	mA	V	μA	V	A	%/°C
1C6122	42.3	25	35.8	1	67.7	7.4	0.095
1C6122A	44.7	25	35.8	1	64.6	7.7	0.095
1C6123	45.9	25	38.8	1	73.5	6.8	0.095
1C6123A	48.5	25	38.8	1	70.1	7.1	0.095
1C6124	50.4	20	42.6	1	80.7	6.2	0.095
1C6124A	53.2	20	42.6	1	77	6.5	0.095
1C6125	55.8	20	47.1	1	89.3	5.6	0.1
1C6125A	58.9	20	47.1	1	85.3	5.9	0.1
1C6126	61.2	20	51.7	1	98	5.1	0.1
1C6126A	64.6	20	51.7	1	97.1	5.1	0.1
1C6127	67.5	20	56	1	108.1	4.6	0.1
1C6127A	71.3	20	56	1	103.1	4.8	0.1
1C6128	73.8	15	62.2	1	118.2	4.2	0.1
1C6128A	77.9	15	62.2	1	112.8	4.4	0.1
1C6129	81.9	15	69.2	1	131.1	3.8	0.1
1C6129A	86.5	15	69.2	1	125.1	4	0.1
1C6130	90	12	76	1	144.1	3.5	0.1
1C6130A	95	12	76	1	137.6	3.6	0.1
1C6131	99	12	83.6	1	158.5	3.2	0.1
1C6131A	104.5	12	83.6	1	151.3	3.3	0.1
1C6132	108	10	91.2	1	172.9	2.9	0.1
1C6132A	114	10	91.2	1	165.1	3	0.1
1C6133	117	10	98.8	1	187.3	2.7	0.105
1C6133A	123.5	10	98.8	1	178.8	2.8	0.105
1C6134	135	8	114	1	216.2	2.3	0.105
1C6134A	142.5	8	114	1	206.3	2.4	0.105
1C6135	144	8	121.6	1	228.8	2.2	0.105
1C6135A	152	8	121.6	1	218.4	2.3	0.105
1C6136	162	5	136.8	1	257.4	1.9	0.11
1C6136A	171	5	136.8	1	245.7	2	0.11
1C6137	180	5	152	1	286	1.7	0.11
1C6137A	190	5	152	1	273	1.8	0.11

Catalog P/N	Breakdown Voltage VBR @ IBR Min	Test Current IBR	Working Peak Reverse Voltage VRWM	Max Reverse Current IR @VRWM	Max Clamping Voltage Vc(max) @Ip tp=1ms	Max Peak Pulse Current Ip	Max Temp Coeff of IR1 VBR α VBR
1500W 10x1000 μs	V	mA	V	μA	V	A	%/°C
1C6142	9	125	7.6	100	15.2	98.7	0.07
1C6142A	9.5	125	7.6	100	14.5	103.4	0.07
1C6143	9.9	125	8.4	20	16.3	92	0.07
1C6143A	10.45	125	8.4	20	15.6	96.2	0.07
1C6144	10.8	100	9.1	20	17.7	84.7	0.07
1C6144A	11.4	100	9.1	20	16.9	88.8	0.07
1C6145	11.7	100	9.9	20	19	78.9	0.08
1C6145A	12.35	100	9.9	20	18.2	82.4	0.08
1C6146	13.5	75	11.4	20	21.9	68.5	0.08
1C6146A	14.25	75	11.4	20	21	71.4	0.08
1C6147	14.4	75	12.2	20	23.4	64.1	0.08
1C6147A	15.2	75	12.2	20	22.3	67.3	0.08
1C6148	16.2	65	13.7	10	26.3	57	0.085
1C6148A	17.1	65	13.7	10	25.1	59.8	0.085
1C6149	18	65	15.2	5	29	51.7	0.085
1C6149A	19	65	15.2	5	27.7	54.2	0.085
1C6150	19.8	50	16.7	5	31.9	47	0.085
1C6150A	20.9	50	16.7	5	30.5	49.2	0.085
1C6151	21.6	50	18.2	5	34.8	43.1	0.09
1C6151A	22.8	50	18.2	5	33.3	45	0.09
1C6152	24.3	50	20.6	5	39.2	38.3	0.09
1C6152A	25.7	50	20.6	5	37.4	40.1	0.09
1C6153	27	40	22.8	5	43.6	34.4	0.09
1C6153A	28.5	40	22.8	5	41.6	36	0.09
1C6154	29.7	40	25.1	5	47.9	31.3	0.095
1C6154A	31.4	40	25.1	5	45.7	32.8	0.095
1C6155	32.4	30	27.4	5	52.3	28.7	0.095
1C6155A	34.2	30	27.4	5	49.9	30.1	0.095
1C6156	35.1	30	29.7	5	56.2	26.7	0.095
1C6156A	37.1	30	29.7	5	53.6	28	0.095
1C6157	38.7	30	32.7	5	62	24.2	0.095
1C6157A	40.9	30	32.7	5	59.1	25.4	0.095
1C6158	42.3	25	35.8	5	67.7	22.2	0.095
1C6158A	44.7	25	35.8	5	64.6	23.2	0.095

Catalog P/N	Breakdown Voltage VBR @ IBR Min	Test Current IBR	Working Peak Reverse Voltage VRWM	Max Reverse Current IR @VRWM	Max Clamping Voltage Vc(max) @Ip tp=1ms	Max Peak Pulse Current Ip	Max Temp Coeff of IR1 VBR α VBR
1500W 10x1000 μs	V	mA	V	μA	V	A	%/°C
1C6159	45.9	25	38.8	5	73.5	20.4	0.095
1C6159A	48.5	25	38.8	5	70.1	21.4	0.095
1C6160	50.4	20	42.6	5	80.7	18.6	0.095
1C6160A	53.2	20	42.6	5	77	19.5	0.095
1C6161	55.8	20	47.1	5	89.3	16.8	0.1
1C6161A	58.9	20	47.1	5	85.3	17.6	0.1
1C6162	61.2	20	51.7	5	98	15.3	0.1
1C6162A	64.6	20	51.7	5	97.1	15.4	0.1
1C6163	67.5	20	56	5	108.1	13.9	0.1
1C6163A	71.3	20	56	5	103.1	14.5	0.1
1C6164	73.8	15	62.2	5	118.2	12.7	0.1
1C6164A	77.9	15	62.2	5	112.8	13.3	0.1
1C6165	81.9	15	69.2	5	131.1	11.4	0.1
1C6165A	86.5	15	69.2	5	125.1	12	0.1
1C6166	90	12	76	5	144.1	10.4	0.1
1C6166A	95	12	76	5	137.6	10.9	0.1
1C6167	99	12	83.6	5	158.5	9.5	0.1
1C6167A	104.5	12	83.6	5	151.3	9.9	0.1
1C6168	108	10	91.2	5	172.9	8.7	0.1
1C6168A	114	10	91.2	5	165.1	9.1	0.1
1C6169	117	10	98.8	5	187.3	8	0.105
1C6169A	123.5	10	98.8	5	178.8	8.4	0.105
1C6170	135	8	114	5	216.2	6.9	0.105
1C6170A	142.5	8	114	5	206.3	7.3	0.105
1C6171	144	8	121.6	5	228.8	6.6	0.105
1C6171A	152	8	121.6	5	218.4	6.9	0.105
1C6172	162	5	136.8	5	257.4	5.8	0.11
1C6172A	171	5	136.8	5	245.7	6.1	0.11
1C6173	180	5	152	5	286	5.2	0.11
1C6173A	190	5	152	5	273	5.5	0.11

Chip Mechanical Dimensions: In mil(mm)



Standard Metallization: Top Side: Ag, 25 kÅ minimum

Bottom Side: Ag, 25 kÅ minimum

Bottom side is cathode, top side is anode.

Type	Diameter A	Flat to Flat B	Metal Diameter C	Metal Flat to Flat E	Thickness Z
500W TVS (chip: 1C6105 to 1C6137A)	0.090 ± 0.003 (2.286 ± 0.076)	0.079 ± 0.003 (2.006 ± 0.076)	0.072 ± 0.003 (1.829 ± 0.076)	0.062 ± 0.003 (1.575 ± 0.076)	0.010 ± 0.001 (0.254 ± 0.025)
1500W TVS (chip: 1C6142 to 1C6173A)	0.125 ± 0.003 (3.175 ± 0.076)	0.107 ± 0.003 (2.718 ± 0.076)	0.100 ± 0.003 (2.540 ± 0.076)	0.087 ± 0.003 (2.210 ± 0.076)	0.010 ± 0.001 (0.254 ± 0.025)

Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μs	V	V	mA	V	μA	V	A
SZ1605V0G	6.4	7.82	10	5	1000	9.6	312.5
SZ1605V0CG	6.4	7.82	10	5	1000	9.6	312.5
SZ1606V0G	6.67	8.15	10	6	1000	11.4	263.2
SZ1606V0CG	6.67	8.15	10	6	1000	11.4	263.2
SZ1606V5G	7.22	8.82	10	6.5	500	12.3	243.9
SZ1606V5CG	7.22	8.82	10	6.5	500	12.3	243.9
SZ1607V0G	7.78	9.51	10	7	200	13.3	225.6
SZ1607V0CG	7.78	9.51	10	7	200	13.3	225.6
SZ1607V5G	8.33	10.18	1	7.5	100	14.3	209.8
SZ1607V5CG	8.33	10.18	1	7.5	100	14.3	209.8
SZ1608V0G	8.99	10.99	1	8	50	15	220
SZ1608V0CG	8.99	10.99	1	8	50	15	220
SZ1608V5G	9.44	11.54	1	8.5	25	15.9	188.8
SZ1608V5CG	9.44	11.54	1	8.5	25	15.9	188.8
SZ1609V0G	10	12.22	1	9	10	16.9	177.4
SZ1609V0CG	10	12.22	1	9	10	16.9	177.4
SZ160010G	11.1	13.57	1	10	5	18.8	159.6
SZ160010CG	11.1	13.57	1	10	5	18.8	159.6
SZ160011G	12.2	14.91	1	11	5	20.1	149.2
SZ160011CG	12.2	14.91	1	11	5	20.1	149.2
SZ160012G	13.3	16.26	1	12	5	22	136.4
SZ160012CG	13.3	16.26	1	12	5	22	136.4
SZ160013G	14.4	17.6	1	13	5	23.8	126
SZ160013CG	14.4	17.6	1	13	5	23.8	126
SZ160014G	15.6	19.07	1	14	5	25.8	116.2
SZ160014CG	15.6	19.07	1	14	5	25.8	116.2
SZ160015G	16.7	20.41	1	15	5	26.9	111.6
SZ160015CG	16.7	20.41	1	15	5	26.9	111.6
SZ160016G	17.8	21.76	1	16	5	28.8	104.2
SZ160016CG	17.8	21.76	1	16	5	28.8	104.2
SZ160017G	18.9	23.1	1	17	5	30.5	98.4
SZ160017CG	18.9	23.1	1	17	5	30.5	98.4
SZ160018G	20	24.44	1	18	5	32.2	93.2
SZ160018CG	20	24.44	1	18	5	32.2	93.2

Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μs	V	V	mA	V	μA	V	A
SZ160020G	22.2	27.13	1	20	5	35.8	83.8
SZ160020CG	22.2	27.13	1	20	5	35.8	83.8
SZ160022G	24.4	29.82	1	22	5	39.4	76.2
SZ160022CG	24.4	29.82	1	22	5	39.4	76.2
SZ160024G	26.7	32.63	1	24	5	43	69.8
SZ160024CG	26.7	32.63	1	24	5	43	69.8
SZ160026G	28.9	35.32	1	26	5	46.6	64.4
SZ160026CG	28.9	35.32	1	26	5	46.6	64.4
SZ160028G	31.1	38.01	1	28	5	50	60
SZ160028CG	31.1	38.01	1	28	5	50	60
SZ160030G	33.3	40.7	1	30	5	53.5	56
SZ160030CG	33.3	40.7	1	30	5	53.5	56
SZ160033G	36.7	44.86	1	33	5	59	50.4
SZ160033CG	36.7	44.86	1	33	5	59	50.4
SZ160036G	40	48.89	1	36	5	64.3	46.6
SZ160036CG	40	48.89	1	36	5	64.3	46.6
SZ160040G	44.4	54.27	1	40	5	71.4	42
SZ160040CG	44.4	54.27	1	40	5	71.4	42
SZ160043G	47.8	58.42	1	43	5	76.6	39.2
SZ160043CG	47.8	58.42	1	43	5	76.6	39.2
SZ160045G	50	61.11	1	45	5	80.3	37.4
SZ160045CG	50	61.11	1	45	5	80.3	37.4
SZ160048G	53.3	65.14	1	48	5	85.5	35
SZ160048CG	53.3	65.14	1	48	5	85.5	35
SZ160051G	56.7	69.3	1	51	5	91.1	37
SZ160051CG	56.7	69.3	1	51	5	91.1	37
SZ160054G	60	73.33	1	54	5	96.3	31.2
SZ160054CG	60	73.33	1	54	5	96.3	31.2
SZ160058G	64.4	78.71	1	58	5	103	29.2
SZ160058CG	64.4	78.71	1	58	5	103	29.2
SZ160060G	66.7	81.52	1	60	5	107	28
SZ160060CG	66.7	81.52	1	60	5	107	28
SZ160064G	71.1	86.9	1	64	5	114	26.4
SZ160064CG	71.1	86.9	1	64	5	114	26.4

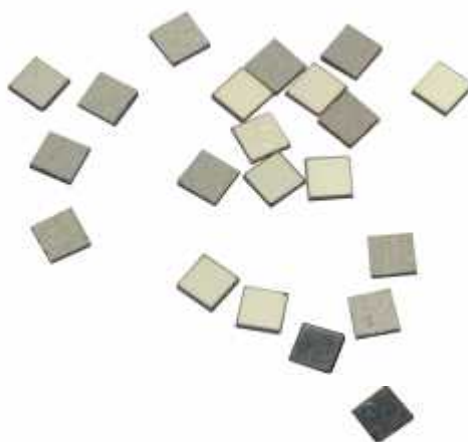
Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μs	V	V	mA	V	μA	V	A
SZ160070G	77.8	95.09	1	70	5	125	24
SZ160070CG	77.8	95.09	1	70	5	125	24
SZ160075G	83.3	101.81	1	75	5	134	22.4
SZ160075CG	83.3	101.81	1	75	5	134	22.4
SZ160078G	86.7	105.97	1	78	5	139	21.6
SZ160078CG	86.7	105.97	1	78	5	139	21.6
SZ160085G	94.4	115.38	1	85	5	151	19.8
SZ160085CG	94.4	115.38	1	85	5	151	19.8
SZ16090G	100	122.22	1	90	5	160	18.8
SZ16090CG	100	122.22	1	90	5	160	18.8
SZ160100G	111	135.67	1	100	5	179	16.6
SZ160100CG	111	135.67	1	100	5	179	16.6
SZ160110G	122	149.11	1	110	5	196	15.4
SZ160110CG	122	149.11	1	110	5	196	15.4
SZ160120G	133	162.56	1	120	5	214	14
SZ160120CG	133	162.56	1	120	5	214	14
SZ160130G	144	176	1	130	5	231	13
SZ160130CG	144	176	1	130	5	231	13
SZ160150G	167	204.11	1	150	5	269	11.2
SZ160150CG	167	204.11	1	150	5	269	11.2
SZ160160G	178	217.56	1	160	5	287	10.4
SZ160160CG	178	217.56	1	160	5	287	10.4
SZ160170G	189	231	1	170	5	304	9.8
SZ160170CG	189	231	1	170	5	304	9.8
SZ1605V0AG	6.4	7.07	10	5	1000	9.2	326
SZ1605V0CAG	6.4	7.07	10	5	1000	9.2	326
SZ1606V0AG	6.67	7.37	10	6	1000	10.3	291.3
SZ1606V0CAG	6.67	7.37	10	6	1000	10.3	291.3
SZ1606V5AG	7.22	7.98	10	6.5	500	11.2	267.9
SZ1606V5CAG	7.22	7.98	10	6.5	500	11.2	267.9
SZ1607V0AG	7.78	8.6	10	7	200	12	250
SZ1607V0CAG	7.78	8.6	10	7	200	12	250
SZ1607V5AG	8.33	9.21	1	7.5	100	12.9	232.6
SZ1607V5CAG	8.33	9.21	1	7.5	100	12.9	232.6

Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μ s	V	V	mA	V	μ A	V	A
SZ1608V0AG	8.89	9.94	1	8	50	13.6	220.6
SZ1608V0CAG	8.89	9.94	1	8	50	13.6	220.6
SZ1608V5AG	9.44	10.43	1	8.5	25	14.4	208.4
SZ1608V5CAG	9.44	10.43	1	8.5	25	14.4	208.4
SZ1609V0AG	10	11.05	1	9	10	15.4	194.8
SZ1609V0CAG	10	11.05	1	9	10	15.4	194.8
SZ160010AG	11.1	12.27	1	10	5	17	176.4
SZ160010CAG	11.1	12.27	1	10	5	17	176.4
SZ160011AG	12.2	13.48	1	11	5	18.2	164.8
SZ160011CAG	12.2	13.48	1	11	5	18.2	164.8
SZ160012AG	13.3	14.7	1	12	5	19.9	150.6
SZ160012CAG	13.3	14.7	1	12	5	19.9	150.6
SZ160013AG	14.4	15.92	1	13	5	21.5	139.4
SZ160013CAG	14.4	15.92	1	13	5	21.5	139.4
SZ160014AG	15.6	17.24	1	14	5	23.2	129.4
SZ160014CAG	15.6	17.24	1	14	5	23.2	129.4
SZ160015AG	16.7	18.46	1	15	5	24.4	123
SZ160015CAG	16.7	18.46	1	15	5	24.4	123
SZ160016AG	17.8	19.67	1	16	5	26	115.4
SZ160016CAG	17.8	19.67	1	16	5	26	115.4
SZ160017AG	18.9	20.89	1	17	5	27.6	106.6
SZ160017CAG	18.9	20.89	1	17	5	27.6	106.6
SZ160018AG	20	22.11	1	18	5	29.2	102.8
SZ160018CAG	20	22.11	1	18	5	29.2	102.8
SZ160020AG	22.2	24.54	1	20	5	32.4	92.6
SZ160020CAG	22.2	24.54	1	20	5	32.4	92.6
SZ160022AG	24.4	26.97	1	22	5	35.5	84.4
SZ160022CAG	24.4	26.97	1	22	5	35.5	84.4
SZ160024AG	26.7	29.51	1	24	5	38.9	77.2
SZ160024CAG	26.7	29.51	1	24	5	38.9	77.2
SZ160026AG	28.9	31.94	1	26	5	42.1	71.2
SZ160026CAG	28.9	31.94	1	26	5	42.1	71.2
SZ160028AG	31.1	34.37	1	28	5	45.4	66
SZ160028CAG	31.1	34.37	1	28	5	45.4	66

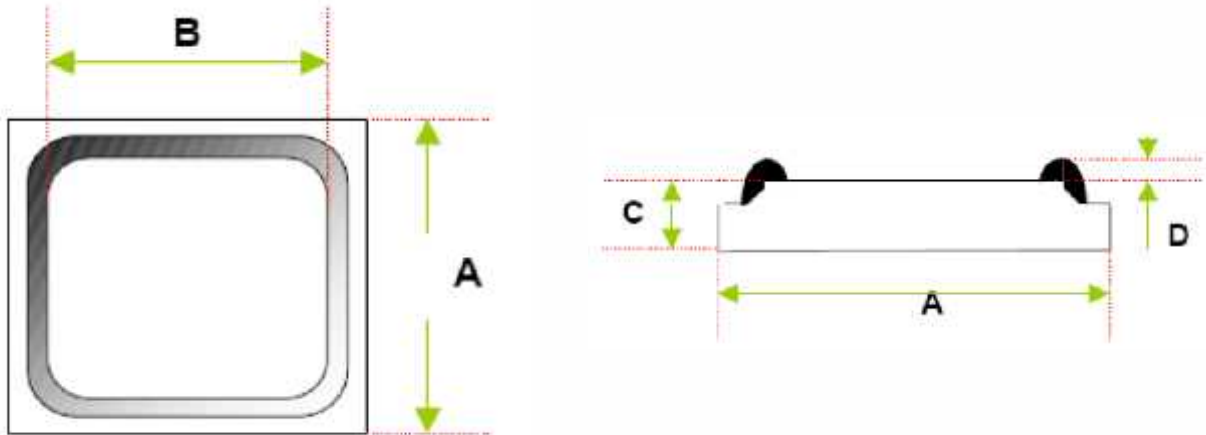
Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μs	V	V	mA	V	μA	V	A
SZ160030AG	33.3	36.81	1	30	5	48.4	62
SZ160030CAG	33.3	36.81	1	30	5	48.4	62
SZ160033AG	36.7	40.56	1	33	5	53.3	56.2
SZ160033CAG	36.7	40.56	1	33	5	53.3	56.2
SZ160036AG	40	44.21	1	36	5	58.1	51.6
SZ160036CAG	40	44.21	1	36	5	58.1	51.6
SZ160040AG	44.4	49.07	1	40	5	64.5	46.4
SZ160040CAG	44.4	49.07	1	40	5	64.5	46.4
SZ160043AG	47.8	52.83	1	43	5	69.4	43.2
SZ160043CAG	47.8	82.83	1	43	5	69.4	43.2
SZ160045AG	50	55.26	1	45	5	72.7	41.2
SZ160045CAG	50	55.26	1	45	5	72.7	41.2
SZ160048AG	53.3	58.91	1	48	5	77.4	38.8
SZ160048CAG	53.3	58.91	1	48	5	77.4	38.8
SZ160051AG	56.7	62.67	1	51	5	82.4	36.4
SZ160051CAG	56.7	62.67	1	51	5	82.4	36.4
SZ160054AG	60	66.32	1	54	5	87.1	34.4
SZ160054CAG	60	66.32	1	54	5	87.1	34.4
SZ160058AG	64.4	71.18	1	58	5	93.6	32
SZ160058CAG	64.4	71.18	1	58	5	93.6	32
SZ160060AG	66.7	73.72	1	60	5	96.8	31
SZ160060CAG	66.7	73.72	1	60	5	96.8	31
SZ160064AG	71.1	78.58	1	64	5	103	29.2
SZ160064CAG	71.1	78.58	1	64	5	103	29.2
SZ160070AG	77.8	85.99	1	70	5	113	26.6
SZ160070CAG	77.8	85.99	1	70	5	113	26.6
SZ160075AG	83.3	92.07	1	75	5	121	24.8
SZ160075CAG	83.3	92.07	1	75	5	121	24.8
SZ160078AG	86.7	95.83	1	78	5	126	22.8
SZ160078CAG	86.7	95.83	1	78	5	126	22.8
SZ160085AG	94.4	104.34	1	85	5	137	20.8
SZ160085CAG	94.4	104.34	1	85	5	137	20.8
SZ16090AG	100	110.53	1	90	5	146	20.6
SZ16090CAG	100	110.53	1	90	5	146	20.6

Catalog P/N	Breakdown Voltage Min @ IT (VBR)	Breakdown Voltage Max @ IT (VBR)	Test Current (IT)	Reverse Stand-off Voltage (VRWM)	Reverse leakage@ VRWM (IR)	Max Clamping Voltage @ IPP (VC)	Peak Pulse Current (IPP)
160mil 3000W 10x1000 μs	V	V	mA	V	μA	V	A
SZ160100AG	111	122.68	1	100	5	162	18.6
SZ160100CAG	111	122.68	1	100	5	162	18.6
SZ160110AG	122	134.84	1	110	5	177	16.8
SZ160110CAG	122	134.84	1	110	5	177	16.8
SZ160120AG	133	147	1	120	5	193	15.6
SZ160120CAG	133	147	1	120	5	193	15.6
SZ160130AG	144	159.16	1	130	5	209	14.4
SZ160130CAG	144	159.16	1	130	5	209	14.4
SZ160150AG	167	184.58	1	150	5	243	12.4
SZ160150CAG	167	184.58	1	150	5	243	12.4
SZ160160AG	178	196.74	1	160	5	259	11.6
SZ160160CAG	178	196.74	1	160	5	259	11.6
SZ160170AG	189	208.89	1	170	5	275	11
SZ160170CAG	189	208.89	1	170	5	275	11

Note: SZXXXVXCAG/SZXXXXXXCAG: SZ is TVS chip, XXX is chip size, XVX/XXX is chip Voltage, V means decimal point, use within 10 V.
 "C" Suffix Designates Bi-directional Devices, "A" Suffix Designates 5% Tolerance Devices, No Suffix Designates 10% Tolerance Devices, "G" means GPP.



Chip Mechanical Dimensions: In mil(mm)



Standard Metallization: Top Side: Ag, 25 kÅ minimum
 Bottom Side: Ag, 25 kÅ minimum
 Bottom side is cathode, top side is anode.

Chip Size Code	A	B	C	D(Max.)
mil	mil	mil	mil	mil
160	160 ± 2	138 ± 2	11 ± 2	2



Zener – Planar



Catalog P/N	Power Rating (Pd)	Size	Nominal Voltage @ IZT (VZ)	Max Reverse Leakage Current @ VR (IR)	Test Voltage (VR)	MAX. Zener Impedance @ IZT (ZZT)	Test Current (IZT) TA=25°C	MAX. Zener Impedance @ IZK (ZZT)	Test Current (IZK) TA=25°C
	mW								
SZ126V8	200	12	6.8	2	4	15	5	160	0.5
SZ127V5	200	12	7.5	1	5	15	5	160	0.5
SZ128V2	200	12	8.2	0.7	5	15	5	160	0.5
SZ129V1	200	12	9.1	0.2	7	15	5	160	0.5
SZ1210	200	12	10	0.1	8	20	5	160	0.5
SZ1211	200	12	11	0.1	8	20	5	160	0.5
SZ1212	200	12	12	0.1	8	20	5	80	0.5
SZ1213	200	12	13	0.1	8	30	5	80	0.5
SZ1215	200	12	15	0.05	10.5	30	5	80	0.5
SZ1216	200	12	16	0.05	11.2	40	5	80	0.5
SZ1218	200	12	18	0.05	12.6	45	5	80	0.5
SZ1220	200	12	20	0.05	14	55	5	100	0.5
SZ1222	200	12	22	0.05	15.4	55	5	100	0.5
SZ1224	200	12	24	0.05	16.8	70	5	120	0.5
SZ1227	200	12	27	0.05	18.9	80	5	300	0.5
SZ1230	200	12	30	0.05	21	80	5	300	0.5
SZ1233	200	12	33	0.05	23.2	80	5	300	0.5
SZ1236	200	12	36	0.05	25.2	90	5	500	0.5
SZ206V8	500	20	6.8	0.1	3	8	5	150	1
SZ207V5	500	20	7.5	0.1	5	7	5	50	1
SZ208V2	500	20	8.2	0.1	6.2	7	5	50	1
SZ209V1	500	20	9.1	0.1	6.8	10	5	50	1
SZ2010	500	20	10	0.1	7.5	15	5	70	1
SZ2011	500	20	11	0.1	8.2	20	5	70	1
SZ2012	500	20	12	0.1	9.1	20	5	90	1
SZ2013	500	20	13	0.1	10	26	5	110	1
SZ2015	500	20	15	0.1	11	30	5	110	1
SZ2016	500	20	16	0.1	12	40	5	170	1
SZ2018	500	20	18	0.1	13	50	5	170	1
SZ2020	500	20	20	0.1	15	55	5	220	1
SZ2022	500	20	22	0.1	16	55	5	220	1
SZ2024	500	20	24	0.1	18	80	5	220	1
SZ2027	500	20	27	0.1	20	80	5	220	1
SZ2030	500	20	30	0.1	22	80	5	220	1

Zener – Planar

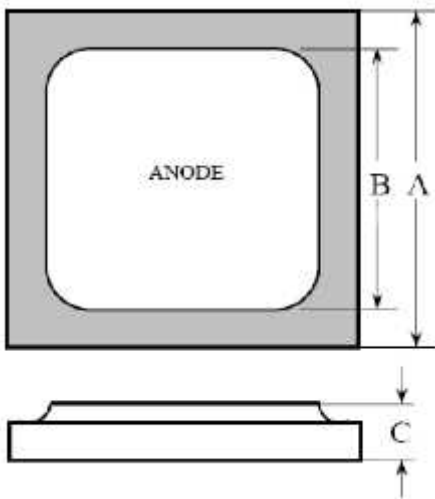


Catalog P/N	Power Rating (Pd)	Size	Nominal Voltage @ IZT (VZ)	Max Reverse Leakage Current @ VR (IR)	Test Voltage (VR)	MAX. Zener Impedance @ IZT (ZZT)	Test Current (IZT) TA=25°C	MAX. Zener Impedance @ IZK (ZZT)	Test Current (IZK) TA=25°C
	mW		mil	V	μA	V		mA	
SZ2033	500	20	33	0.1	24	80	5	220	1
SZ2036	500	20	36	0.1	27	80	5	220	1

Note: ①Vz Tolerance is ±5%

② SZXXXXV/SZXXXX: SZ is Zener chip, XX is chip size, XVX/XX is chip Voltage. V uses for Vz lower than 10V.

Chip Mechanical Dimensions: In mil(mm)



Standard Metallization: Top Side: Al, 25 kÅ minimum
 Bottom Side: Ag, 5 kÅ minimum
 Bottom side is cathode, top side is anode.

Chip Size	A	B	C
mil	mil	mil	mil
12	12 ± 2	9 ± 2	8.5 ± 1
20	20 ± 2	13 ± 2	8.5 ± 1

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (VFM)		Max. Reverse Leakage Current @ VFM (I _r)		Max. Junction Capacitance (C _T) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD035SD15A/B	15	35	1	20	0.37	0.33 ^③	0.5	25 ^④	80	100
SD040SD15A/B	15	40	1	20	0.37	0.33 ^③	0.5	25 ^④	80	100
SD045SD15A/B	15	45	2	25	0.37	0.33 ^③	1	50 ^④	160	100
SD050SD15A/B	15	50	2	25	0.37	0.33 ^③	1	50 ^④	160	100
SD055SD15A/B	15	55	3	55	0.37	0.33 ^③	1.5	70 ^④	240	100
SD060SD15A/B	15	60	3	55	0.37	0.33 ^③	1.5	70 ^④	240	100
SD067SD15A/B	15	67	5	120	0.37	0.33 ^③	2.5	118 ^④	415	100
SD071SD15A/B	15	70	5	120	0.37	0.33 ^③	2.5	118 ^④	415	100
SD072SD15A/B	15	72	5	120	0.37	0.33 ^③	2.5	118 ^④	415	100
SD070SD15A/B	15	70×92	6	130	0.37	0.33 ^③	3	140 ^④	500	100
SD085SD15A/B/C	15	85	7.5	140	0.37	0.33 ^③	3.5	170 ^④	600	100
SD088SD15A/B/C	15	88	7.5	140	0.37	0.33 ^③	3.5	170 ^④	600	100
SD090SD15A/B/C	15	90	7.5	140	0.37	0.33 ^③	3.5	170 ^④	600	100
SD98SD15A/B	15	98	10	200	0.37	0.33 ^③	5.8	280 ^④	980	100
SD110SD15A/B	15	110	10	200	0.37	0.33 ^③	5.8	280 ^④	980	100
SD121SD15A/B	15	120	15	280	0.37	0.33 ^③	7	340 ^④	1200	100
SD125SD15A/B/C	15	125	15	280	0.37	0.33 ^③	7	340 ^④	1200	100
SD170SD15A/B	15	170×115	20	396	0.37	0.33 ^③	10	522 ^④	2000	100
SD175SD15A/B/C	15	175	30	570	0.37	0.33 ^③	14	680 ^④	2400	100
SD200SD15A/B/C	15	200	60	860	0.41	0.37 ^③	20	1000 ^④	3600	100
SD275SD15A/B/C	15	275	120	1650	0.41	0.37 ^③	40	2000 ^④	7200	100
SD035SE30A/B	30	35	1	20	0.45	0.32	0.12	32	90	125
SD040SE30A/B	30	40	1	20	0.45	0.32	0.12	32	90	125
SD045SE30A/B	30	45	2	25	0.45	0.32	0.24	64	180	125
SD055SE30A/B	30	55	3	55	0.45	0.32	0.4	96	270	125
SD060SE30A/B	30	60	3	55	0.45	0.32	0.4	96	270	125
SD067SE30A/B	30	67	5	120	0.45	0.32	0.7	150	475	125
SD071SE30A/B	30	70	5	120	0.45	0.32	0.7	150	475	125
SD072SE30A/B	30	72	5	120	0.45	0.32	0.7	150	475	125
SD070SE30A/B	30	70×92	6	130	0.45	0.32	0.8	180	500	125
SD085SE30A/B/C	30	85	7.5	140	0.45	0.32	1	240	675	125
SD088SE30A/B/C	30	88	7.5	140	0.45	0.32	1	240	675	125

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (V _{FM})		Max. Reverse Leakage Current @ V _{FM} (I _r)		Max. Junction Capacitance (C _J) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD090SE30A/B/C	30	90	7.5	140	0.45	0.32	1	240	675	125
SD098SE30A/B/C	30	98	10	200	0.45	0.32	1.7	340	1150	125
SD110SE30A/B/C	30	110	10	200	0.45	0.32	1.7	340	1150	125
SD121SE30A/B	30	120	15	280	0.45	0.32	2	460	1350	125
SD125SE30A/B/C	30	125	15	280	0.45	0.32	2	460	1350	125
SD170SE30A/B/C	30	170 × 115	20	396	0.45	0.32	3	700	2200	125
SD175SE30A/B/C	30	175	30	570	0.45	0.32	4	960	2700	125
SD200SE30A/B/C	30	200	60	860	0.48	0.35	6	1440	4050	125
SD275SE30A/B/C	30	275	120	1650	0.48	0.35	12	2880	8100	125
SD035SA30A/B	30	35	1	20	0.49	0.39	0.12	6	90	150
SD040SA30A/B	30	40	1	20	0.49	0.39	0.12	6	90	150
SD045SA30A/B	30	45	2	25	0.49	0.39	0.24	12	180	150
SD055SA30A/B	30	55	3	55	0.49	0.39	0.4	20	220	150
SD060SA30A/B	30	60	3	55	0.49	0.39	0.4	20	220	150
SD067SA30A/B	30	67	5	120	0.49	0.39	0.7	35	380	150
SD071SA30A/B	30	70	5	120	0.49	0.39	0.7	35	380	150
SD072SA30A/B	30	72	5	120	0.49	0.39	0.7	35	380	150
SD070SA30A/B	30	70 × 92	6	120	0.49	0.39	0.8	42	450	150
SD085SA30A/BC	30	85	7.5	140	0.49	0.39	1	50	550	150
SD088SA30A/BC	30	88	7.5	140	0.49	0.39	1	50	550	150
SD090SA30A/BC	30	90	7.5	140	0.49	0.39	1	50	550	150
SD098SA30A/B	30	98	10	200	0.49	0.39	1.7	80	900	150
SD110SA30A/B	30	110	10	200	0.49	0.39	1.7	80	900	150
SD121SA30A/B	30	120	15	280	0.49	0.39	2	100	1100	150
SD125SA30A/B/C	30	125	15	280	0.49	0.39	2	100	1100	150
SD170SA30A/B	30	170 × 115	20	396	0.49	0.39	3	150	1600	150
SD175SA30A/B/C	30	175	30	570	0.49	0.39	4	200	2200	150
SD200SA30A/B/C	30	200	60	860	0.53	0.43	6	300	3300	150
SD275SA30A/B/C	30	275	120	1650	0.53	0.43	12	600	6600	150
SD035SE45A/B	45	35	1	20	0.51	0.47	0.1	20	60	125
SD040SE45A/B	45	40	1	20	0.51	0.47	0.1	20	60	125
SD045SE45A/B	45	45	2	25	0.51	0.47	0.2	40	120	125

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (V _{FM})		Max. Reverse Leakage Current @ V _{FM} (I _r)		Max. Junction Capacitance (C _J) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD055SE45A/B	45	55	3	55	0.51	0.47	0.3	55	180	125
SD060SE45A/B	45	60	3	55	0.51	0.47	0.3	55	180	125
SD067SE45A/B	45	67	5	120	0.51	0.47	0.55	83	297	125
SD071SE45A/B	45	70	5	120	0.51	0.47	0.55	83	297	125
SD072SE45A/B	45	72	5	120	0.51	0.47	0.55	83	297	125
SD070SE45A/B	45	70×92	6	130	0.51	0.47	0.66	100	350	125
SD085SE45A/B/C	45	85	7.5	140	0.51	0.47	0.8	120	430	125
SD088SE45A/B/C	45	88	7.5	140	0.51	0.47	0.8	120	430	125
SD090SE45A/B/C	45	90	7.5	140	0.51	0.47	0.8	120	430	125
SD098SE45A/B	45	98	10	200	0.51	0.47	1.3	190	720	125
SD110SE45A/B	45	110	10	200	0.51	0.47	1.3	190	720	125
SD121SE45A/B	45	120	15	280	0.51	0.47	1.5	250	870	125
SD125SE45A/B/C	45	125	15	280	0.51	0.47	1.5	250	870	125
SD170SE45A/B	45	170×115	20	396	0.51	0.47	2.4	380	1160	125
SD175SE45A/B/C	45	175	30	570	0.51	0.47	3.5	500	1700	125
SD200SE45A/B/C	45	200	60	860	0.54	0.5	5	800	2600	125
SD275SE45A/B/C	45	275	120	1650	0.54	0.5	10	1600	5200	125
SD035SA45A/B	45	35	1	20	0.56	0.51	0.1	4.5	53	150
SD040SA45A/B	45	40	1	20	0.56	0.51	0.1	4.5	53	150
SD045SA45A/B	45	50	2	25	0.56	0.51	0.2	9	106	150
SD055SA45A/B	45	55	3	55	0.56	0.51	0.3	14	160	150
SD060SA45A/B	45	60	3	55	0.56	0.51	0.3	14	160	150
SD067SA45A/B	45	67	5	120	0.56	0.51	0.52	25	277	150
SD071SA45A/B	45	70	5	120	0.56	0.51	0.52	25	277	150
SD072SA45A/B	45	72	5	120	0.56	0.51	0.52	25	277	150
SD070SA45A/B	45	70×92	6	130	0.56	0.51	0.62	30	330	150
SD085SA45A/B	45	85	7.5	140	0.56	0.51	0.75	35	400	150
SD088SA45A/B	45	88	7.5	140	0.56	0.51	0.75	35	400	150
SD090SA45A/B/C	45	90	7.5	140	0.56	0.51	0.75	35	400	150
SD098SA45A/B	45	98	10	200	0.56	0.51	1.2	58	640	150
SD110SA45A/B	45	110	10	200	0.56	0.51	1.2	58	640	150
SD121SA45A/B	45	120	15	280	0.56	0.51	1.5	70	800	150

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (V _{FM})		Max. Reverse Leakage Current @ V _{FM} (I _r)		Max. Junction Capacitance (C _J) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD125SA45A/B/C	45	125	15	280	0.56	0.51	1.5	70	800	150
SD170SA45A/B	45	170×115	20	396	0.56	0.51	2.1	100	1200	150
SD175SA45A/B/C	45	175	30	570	0.56	0.51	3	140	1600	150
SD200SA45A/B/C	45	200	60	860	0.6	0.57	4.5	210	2400	150
SD275SA45A/B/C	45	275	120	1650	0.6	0.57	9	420	4800	150
SD035SB45A/B	45	35	1	20	0.64	0.57	0.03	1	53	175
SD040SB45A/B	45	40	1	20	0.64	0.57	0.03	1	53	175
SD045SB45A/B	45	45	2	25	0.64	0.57	0.08	2	106	175
SD055SB45A/B	45	55	3	55	0.64	0.57	0.08	3	160	175
SD060SB45A/B	45	60	3	55	0.64	0.57	0.08	3	160	175
SD067SB45A/B	45	67	5	120	0.64	0.57	0.14	5.2	277	175
SD071SB45A/B	45	70	5	120	0.64	0.57	0.14	5.2	277	175
SD072SB45A/B	45	72	5	120	0.64	0.57	0.14	5.2	277	175
SD070SB45A/B	45	70×92	6	130	0.64	0.57	0.16	6.2	330	175
SD085SB45A/B	45	85	7.5	140	0.64	0.57	0.2	7.5	400	175
SD088SB45A/B	45	88	7.5	140	0.64	0.57	0.2	7.5	400	175
SD090SB45A/B/C	45	90	7.5	140	0.64	0.57	0.2	7.5	400	175
SD098SB45A/B	45	98	10	200	0.64	0.57	0.3	12	640	175
SD110SB45A/B	45	110	10	200	0.64	0.57	0.3	12	640	175
SD121SB45A/B	45	120	15	280	0.64	0.57	0.4	15	800	175
SD125SB45A/B/C	45	125	15	280	0.64	0.57	0.4	15	800	175
SD170SB45A/B	45	170×115	20	396	0.64	0.57	0.6	21	1200	175
SD175SB45A/B/C	45	175	30	570	0.64	0.57	0.8	30	1600	175
SD200SB45A/B/C	45	200	60	860	0.66	0.59	1.2	45	2400	175
SD275SB45A/B/C	45	275	120	1650	0.66	0.59	2.4	90	4800	175
SD035SA60A/B	60	35	1	20	0.65	0.6	0.1	9	53	150
SD040SA60A/B	60	40	1	20	0.65	0.6	0.1	9	53	150
SD045SA60A/B	60	45	2	25	0.65	0.6	0.2	18	106	150
SD055SA60A/B	60	55	3	55	0.65	0.6	0.4	26	160	150
SD060SA60A/B	60	60	3	55	0.65	0.6	0.4	26	160	150
SD067SA60A/B	60	67	5	120	0.65	0.6	0.7	48	277	150
SD071SA60A/B	60	70	5	120	0.65	0.6	0.7	48	277	150

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (VFM)		Max. Reverse Leakage Current @ VFM (I _r)		Max. Junction Capacitance (C _T) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD072SA60A/B	60	72	5	120	0.65	0.6	0.7	48	277	150
SD070SA60A/B	60	70×92	6	130	0.65	0.6	0.8	60	330	150
SD085SA60A/B	60	85	7.5	140	0.65	0.6	1	70	400	150
SD088SA60A/B	60	88	7.5	140	0.65	0.6	1	70	400	150
SD090SA60A/B/C	60	90	7.5	140	0.65	0.6	1	70	400	150
SD098SA60A/B	60	98	10	200	0.65	0.6	1.6	110	640	150
SD110SA60A/B	60	110	10	200	0.65	0.6	1.6	110	640	150
SD121SA60A/B	60	120	15	280	0.65	0.6	2	140	800	150
SD125SA60A/B/C	60	125	15	280	0.65	0.6	2	140	800	150
SD170SA60A/B	60	170×115	20	396	0.65	0.6	3	200	1200	150
SD175SA60A/B/C	60	175	30	570	0.65	0.6	4	280	1600	150
SD200SA60A/B/C	60	200	60	860	0.68	0.64	6	420	2400	150
SD275SA60A/B/C	60	275	120	1650	0.68	0.64	11	840	4800	150
SD035SB60A/B	60	35	1	20	0.68	0.62	0.05	2	70	175
SD040SB60A/B	60	40	1	20	0.68	0.62	0.05	2	70	175
SD045SB60A/B	60	45	2	25	0.68	0.62	0.1	4	140	175
SD055SB60A/B	60	55	3	55	0.68	0.62	0.12	6	200	175
SD060SB60A/B	60	60	3	55	0.68	0.62	0.12	6	200	175
SD067SB60A/B	60	67	5	120	0.68	0.62	0.15	10	277	175
SD071SB60A/B	60	70	5	120	0.68	0.62	0.15	10	277	175
SD072SB60A/B	60	72	5	120	0.68	0.62	0.15	10	277	175
SD070SB60A/B	60	70×92	6	130	0.68	0.62	0.2	12	300	175
SD085SB60A/B	60	85	7.5	140	0.68	0.62	0.2	15	400	175
SD088SB60A/B	60	88	7.5	140	0.68	0.62	0.2	15	400	175
SD090SB60A/B/C	60	90	7.5	140	0.68	0.62	0.2	15	400	175
SD098SB60A/B	60	98	10	200	0.68	0.62	0.3	23	600	175
SD110SB60A/B	60	110	10	200	0.68	0.62	0.3	23	600	175
SD121SB60A/B	60	120	15	280	0.68	0.62	0.4	30	720	175
SD125SB60A/B/C	60	125	15	280	0.68	0.62	0.4	30	720	175
SD170SB60A/B	60	170×115	20	396	0.68	0.62	0.6	45	1200	175
SD175SB60A/B/C	60	175	30	570	0.68	0.62	0.8	60	1600	175
SD200SB60A/B/C	60	200	60	860	0.7	0.64	1.2	90	2600	175

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (VFM)		Max. Reverse Leakage Current @ VFM (I _r)		Max. Junction Capacitance (C _T) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD275SB60A/B/C	60	275	120	1650	0.7	0.64	3	180	5000	175
SD070SA80A/B	80	70×92	6	130	0.69	0.64	0.15	20	200	150
SD071SA80A/B	80	70	5	120	0.69	0.64	0.1	15	240	150
SD088SA80A/B	80	88	7.5	140	0.69	0.64	0.2	25	300	150
SD091SA80A/B	80	90	7.5	140	0.69	0.64	0.25	30	400	150
SD125SA80A/B	80	125	15	280	0.7	0.66	0.3	45	600	150
SD170SA80A	80	170×115	20	396	0.7	0.66	0.4	60	800	150
SD035SC100A/B	100	35	1	20	0.84	0.68	0.03	0.6	35	200
SD040SC100A/B	100	40	1	20	0.84	0.68	0.03	0.6	35	200
SD045SC100A//B	100	45	2	25	0.84	0.68	0.06	1.2	70	200
SD050SC100A//B	100	50	2	25	0.84	0.68	0.06	1.2	70	200
SD055SC100A/B	100	55	3	55	0.84	0.68	0.07	1.6	100	200
SD060SC100A/B	100	60	3	55	0.84	0.68	0.07	1.6	100	200
SD067SC100A/B	100	67	5	120	0.84	0.68	0.13	2.8	173	200
SD071SC100A/B	100	70	5	120	0.84	0.68	0.13	2.8	173	200
SD072SC100A/B	100	72	5	120	0.84	0.68	0.13	2.8	173	200
SD070SC100A/B	100	70×92	6	130	0.84	0.68	0.15	3	200	200
SD090SC100A/B/C	100	90	7.5	140	0.84	0.68	0.18	4	250	200
SD098SC100A/B	100	98	10	200	0.84	0.68	0.3	6	400	200
SD110SC100A/B	100	110	10	200	0.84	0.68	0.3	6	400	200
SD121SC100A/B/C	100	120	15	280	0.84	0.68	0.35	8	500	200
SD125SC100A/B/C	100	125	15	280	0.84	0.68	0.35	8	500	200
SD170SC100A/B	100	170×115	20	396	0.84	0.68	0.55	11	760	200
SD175SC100A/B/C	100	175	30	570	0.84	0.68	0.75	15	1000	200
SD200SC100A/B/C	100	200	60	860	0.87	0.72	1	24	1500	200
SD275SC100A/B/C	100	275	120	1650	0.87	0.72	2	48	3000	200
SD035SC150A/B	150	35	1	20	0.89	0.74	0.03	0.6	35	200
SD040SC150A/B	150	40	1	20	0.89	0.74	0.03	0.6	35	200
SD045SC150A/B	150	45	2	25	0.89	0.74	0.06	1.2	70	200
SD055SC150A/B	150	55	3	55	0.89	0.74	0.1	1.6	100	200
SD060SC150A/B	150	60	3	55	0.89	0.74	0.1	1.6	100	200
SD067SC150A/B	150	67	5	120	0.89	0.74	0.15	2.8	165	200

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ I _o (V _{FM})		Max. Reverse Leakage Current @ V _{FM} (I _r)		Max. Junction Capacitance (C _T) ^②	Max. Junction Temperature (T _J)
					25 °C	125°C	25 °C	125°C		
	V	mil	A	A	V	V	mA	mA	pF	°C
SD071SC150A/B	150	70	5	120	0.89	0.74	0.15	2.8	165	200
SD072SC150A/B	150	72	5	120	0.89	0.74	0.15	2.8	165	200
SD070SC150A/B	150	70×92	6	130	0.89	0.74	0.2	3	200	200
SD090SC150A/B/C	150	90	7.5	140	0.89	0.74	0.25	4	250	200
SD091SC150A/B/C	150	90	7.5	140	0.89	0.74	0.25	4	250	200
SD110SC150A/B/C	150	110	10	200	0.89	0.74	0.4	5	300	200
SD121SC150A/B/C	150	120	15	280	0.89	0.74	0.5	6	500	200
SD125SC150A/B/C	150	125	15	280	0.89	0.74	0.5	6	500	200
SD170SC150A/B/C	150	170×115	20	396	0.89	0.74	0.7	11	760	200
SD175SC150A/B/C	150	175	30	570	0.89	0.74	1	15	1000	200
SD200SC150A/B/C	150	200	60	860	0.92	0.79	1.5	24	1500	200
SD275SC150A/B/C	150	275	120	1650	0.92	0.79	3	48	3000	200
SD035SC200A/B	200	35	1	20	0.92	0.76	0.03	0.6	20	200
SD040SC200A/B	200	40	1	20	0.92	0.76	0.03	0.6	20	200
SD045SC200A/B	200	45	2	25	0.92	0.76	0.05	1.2	40	200
SD055SC200A/B	200	55	3	55	0.92	0.76	0.07	1.6	60	200
SD060SC200A/B	200	60	3	55	0.92	0.76	0.07	1.6	60	200
SD067SC200A/B	200	67	5	120	0.92	0.76	0.13	2.8	104	200
SD071SC200A/B	200	70	5	120	0.92	0.76	0.13	2.8	104	200
SD072SC200A/B	200	72	5	120	0.92	0.76	0.13	2.8	104	200
SD070SC200A/B	200	70×92	6	130	0.92	0.76	0.15	3	125	200
SD090SC200A/B/C	200	90	7.5	140	0.92	0.76	0.18	4	150	200
SD091SC200A/B	200	90	7.5	200	0.92	0.76	0.27	6	225	200
SD110SC200A/B	200	110	10	200	0.92	0.76	0.35	8	300	200
SD121SC200A/B/C	200	120	15	230	0.92	0.76	0.35	8	300	200
SD125SC200A/B/C	200	125	15	230	0.92	0.76	0.35	8	300	200
SD170SC200A/B	200	170×115	20	396	0.92	0.76	0.5	11	450	200
SD175SC200A/B/C	200	175	30	570	0.92	0.76	0.7	16	600	200
SD200SC200A/B/C	200	200	60	860	0.95	0.79	1.1	24	900	200
SD275SC200A/B/C	200	275	120	1650	0.95	0.79	2.1	48	1800	200
SD045SN100A	100	45	2	25	0.84	0.68	0.06	1.2	70	175
SD055SN100A/B	100	55	3	55	0.84	0.68	0.07	1.6	100	175

Schottky – Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Average Forward Current (Io)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ Io (VFM)		Max. Reverse Leakage Current @ VFM (Ir)		Max. Junction Capacitance (Cr) ^②	Max. Junction Temperature (Tj)		
	V				mil	A	A	25 °C			125°C	25 °C
	SD060SN100A	100	60	3	55	0.84	0.68	0.07	1.6	100	175	
SD067SN100A	100	67	5	120	0.84	0.68	0.13	2.8	173	175		
SD070SN100A	100	70×92	6	150	0.84	0.68	0.2	5	200	175		
SD071SN100A	100	70	5	120	0.84	0.68	0.13	2.8	173	175		
SD072SN100A/B	100	72	5	120	0.84	0.68	0.13	2.8	173	175		
SD088SN100 A/B	100	88	7.5	140	0.84	0.68	0.18	6	250	175		
SD090SN100A	100	90	7.5	140	0.84	0.68	0.18	6	250	175		
SD110SN100A	100	110	10	200	0.84	0.68	0.3	8	400	175		
SD121SN100A	100	120	15	280	0.84	0.68	0.35	12	500	175		
SD125SN100A	100	125	15	280	0.84	0.68	0.35	12	500	175		
SD170SN100A	100	170×115	20	396	0.84	0.68	0.5	16	800	175		
SD175SN100A	100	175	30	570	0.84	0.68	0.75	15	1000	175		
SD067SN150A	150	67	5	120	0.89	0.74	0.15	2.8	165	175		
SD071SN150A/B	150	70	5	120	0.89	0.74	0.15	2.8	165	175		
SD072SN150A	150	72	5	120	0.89	0.74	0.15	2.8	165	175		
SD070SN150A	150	70×92	6	130	0.89	0.74	0.2	3	200	175		
SD091SN150A	150	90	7.5	140	0.89	0.74	0.25	4	250	175		

① Forward peak pulse current for a cycle, 8.3 ms, Sine pulse.

② Max. Junction Capacitance is in VR=5V, TJ=25°C, fSIG=1MHZ, VSIG=50mV (P-P) Conditions of the measurement.

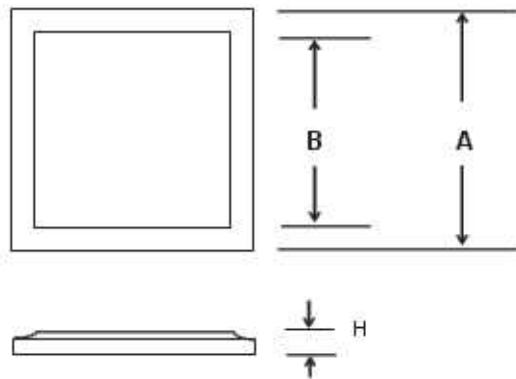
③ TJ=75°C.

④ TJ=100°C.

Schottky – Planar



Chip Mechanical Dimensions: In mil (mm)



Bottom side metallization is Ag:
Thickness 5 KÅ minimum.
Top side metallization is Al or Ag:
Thickness 25 KÅ minimum.

Bottom side is cathode, top side is anode.

Chip thickness H=10.5 ± 1(0.27 ± 0.026) (can be customized according to customer requirement)

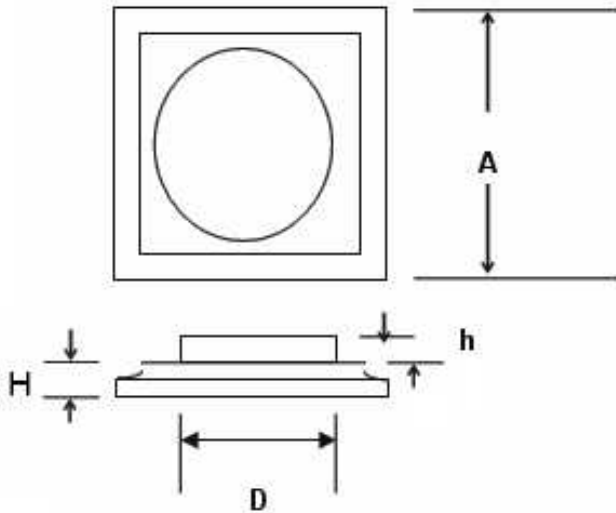
Chip Size	A	B	Chip QTY per Wafer
35	35 ± 3(0.89 ± 0.08)	32 ± 3(0.82 ± 0.08)	18401 per 6"
40	40 ± 3(1.02 ± 0.08)	34 ± 3(0.86 ± 0.08)	6196 per 4"
45	45 ± 3(1.14 ± 0.08)	42 ± 3(1.07 ± 0.08)	11270 per 6"
55	55 ± 3(1.40 ± 0.08)	51 ± 3(1.30 ± 0.08)	7531 per 6"
60	60 ± 3(1.52 ± 0.08)	54 ± 3(1.37 ± 0.08)	6409 per 6"
70	70 X 92 ± 3(1.78 X 2.34 ± 0.08)	62 X 84 ± 3(1.57 X 2.14 ± 0.08)	3611 per 6"
71	70 ± 3(1.78 ± 0.08)	65 ± 3(1.65 ± 0.08)	4730 per 6"
72	72 ± 3(1.83 ± 0.08)	65 ± 3(1.65 ± 0.08)	4475 per 6"
85	85 ± 3(2.16 ± 0.08)	80 ± 3(2.03 ± 0.08)	3220 per 6"
88	88 ± 3(2.24 ± 0.08)	82 ± 3(2.08 ± 0.08)	3010 per 6"
90	90 ± 3(2.29 ± 0.08)	81 ± 3(2.06 ± 0.08)	2880 per 6"
91	90 ± 3(2.29 ± 0.08)	82 ± 3(2.08 ± 0.08)	2880 per 6"
98	98 ± 3(2.49 ± 0.08)	94 ± 3(2.39 ± 0.08)	2430 per 6"
110	110 ± 3(2.79 ± 0.08)	100 ± 3(2.54 ± 0.08)	1935 per 6"
121	120 ± 3(3.05 ± 0.08)	115 ± 3(2.92 ± 0.08)	1650 per 6"
125	125 ± 3(3.18 ± 0.08)	116 ± 3(2.95 ± 0.08)	1502 per 6"
170	170 X 115 ± 3(4.32 X 2.92 ± 0.08)	161 X 106 ± 3(4.09 X 2.69 ± 0.08)	1191 per 6"
175	175 ± 3(4.45 ± 0.008)	163 ± 3(4.14 ± 0.08)	754 per 6"
200	200 ± 3(5.08 ± 0.08)	192 ± 3(4.88 ± 0.08)	587 per 6"
275	275 ± 3(6.99 ± 0.08)	267 ± 3(6.78 ± 0.08)	313 per 6"

Schottky – Planar



Schottky Chip with Molybdenum Tab Top

Mechanical Dimensions: In mil (mm)



Chip Thickness H=15.5 ± 1(0.39 ± 0.026)

A	D	h
90 ± 3(2.29 ± 0.08)	55 ± 5(1.40 ± 0.13)	10 ± 2(0.25 ± 0.05)
125 ± 3(3.18 ± 0.08)	70 ± 5(1.78 ± 0.13)	10 ± 2(0.25 ± 0.05)
175 ± 3(4.15 ± 0.08)	120 ± 5(3.05 ± 0.13)	10 ± 2(0.25 ± 0.05)
200 ± 3(5.08 ± 0.08)	145 ± 5(3.68 ± 0.13)	10 ± 2(0.25 ± 0.05)
275 ± 3(6.99 ± 0.08)	220 ± 5(5.59 ± 0.13)	10 ± 2(0.25 ± 0.05)

Schottky – Ultra Low Vf Trench



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Max. Average Forward Current (IO)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage @ IO (VFM) 25°C	Forward Voltage @ IO (VFM) 125°C	Max. Reverse Leakage Current @ VFM (IR) @25°C	Max. Reverse Leakage Current @ VFM (IR) @125°C	Max. Junction Capacitance (CT) ^②	Max. Junction Temperature (TJ)
	V	mil	A	A	V	V	mA	mA	pF	°C
TSD060SA45A/B	45	60 X 60	3	70	0.55	0.45	0.2	15	250	150
TSD071SA45A/B	45	70 X 70	5	120	0.55	0.45	0.3	20	350	150
TSD090SA45A/B	45	90 X 90	7.5	120	0.55	0.45	0.4	30	500	150
TSD100SA45A/B	45	100 X 100	10	150	0.55	0.45	0.55	40	700	150
TSD110SA45A/B	45	110 X 110	12	200	0.55	0.45	0.65	50	800	150
TSD120SA45A/B	45	120 X 120	15	200	0.55	0.45	0.8	60	1000	150
TSD150SA45A/B	45	150 X 150	20	300	0.55	0.45	1	100	1500	150
TSD060SA100A/B	100	60 X 60	3	70	0.7	0.65	0.06	10	240	150
TSD071SA100A/B	100	70 X 70	5	120	0.7	0.65	0.1	15	300	150
TSD070SA100A/B	100	70 X 90	6	120	0.7	0.65	0.12	20	400	150
TSD090SA100A/B	100	90 X 90	7.5	120	0.7	0.65	0.15	25	450	150
TSD100SA100A/B	100	100 X 100	10	150	0.7	0.65	0.2	30	550	150
TSD110SA100A/B	100	110 X 110	12	200	0.7	0.65	0.25	40	660	150
TSD120SA100A/B	100	120 X 120	15	200	0.7	0.65	0.3	45	800	150
TSD145SA100A/B	100	145 X 120	20	250	0.7	0.65	0.4	60	1000	150

① Forward peak pulse current for a cycle, 8.3 ms, Sine pulse.

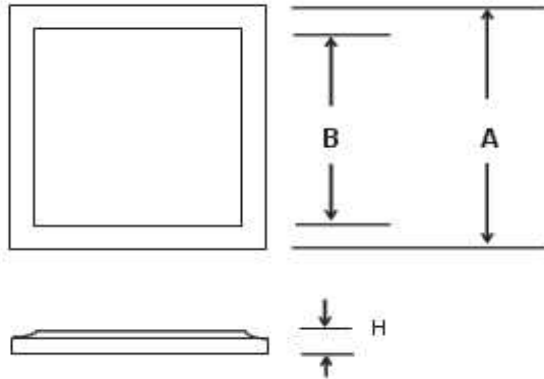
② Max. Junction Capacitance is in VR=5V, TJ=25°C, fSIG=1MHZ, VSIG=50mV (P-P) Conditions of the measurement.

③ A means top side metallization with Al; B means top side metallization with Ag.

Schottky – Ultra Low Vf Trench



Schottky Chip Mechanical Dimensions: In mil(mm)



Bottom side metallization is Ag: Thickness 5 Å minimum.

Top side metallization is Al or Ag: Thickness 25 Å minimum.

Bottom side is cathode, top side is anode.

Chip thickness H=10.5 ± 1(0.27 ± 0.026) (It can be customized according to customer requirement)

Chip Size	A	B
60 X 60	58 ± 3(1.469 ± 0.080)	52 ± 3(1.320 ± 0.080)
70 X 70	68 × 88 ± 3(1.723 × 2.231 ± 0.080)	61 × 81 ± 3(1.549 × 2.057 ± 0.080)
70 X 90	68 ± 3(1.723 ± 0.080)	61 ± 3(1.549 ± 0.080)
90 X 90	88 ± 3(2.231 ± 0.080)	81 ± 3(2.057 ± 0.080)
100 X 100	98 ± 3(2.485 ± 0.080)	91 ± 3(2.311 ± 0.080)
110 X 110	108 ± 3(2.739 ± 0.080)	102 ± 3(2.559 ± 0.080)
120 X 120	118 ± 3(2.993 ± 0.080)	112 ± 3(2.811 ± 0.080)
145 X 120	143 × 118 ± 3(3.603 × 2.993 ± 0.080)	136 × 112 ± 3(3.445 × 2.845 ± 0.080)
150 X 150	148 ± 3(2.993 ± 0.080)	142 ± 3(3.606 ± 0.080)

Ultrafast-Mesa



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Max. Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage@ IO (VFM)	Max. Reverse Leakage Current @ VFM (IR)	Max. Junction Temperature (T _J)	Max. Reverse Recovery Time (Trr) ^②
	V							
SD058UF200A35	200	58	3	65	0.94	2	150	35
SD065UF200A35	200	65	5	80	0.98	2	150	35
SD084UF200A35	200	84	8	125	0.95	2	150	35
SD098UF200A35	200	98	8	200	0.9	2	150	35
SD065UF400A35	400	65	5	80	1.2	2	150	35
SD071UF400A50	400	71	5	100	1.25	2	150	50
SD084UF400A50	400	84	10	125	1.2	2	150	50
SD058UF600A50	600	58	3	65	0.94	2	150	50
SD065UF600A50	600	65	5	80	1.65	2	150	50
SD071UF600A50	600	71	8	100	1.65	2	150	50
SD084UF600A50	600	84	8	125	1.65	2	150	50
SD115UF600A50	600	115	20	250	1.65	4	150	50
SD130UF600A50	600	130	15	300	1.35	4	150	50
SD132UF600A50	600	132	15	300	1.67	4	150	50
SD180UF600A50	600	180	50	400	1.35	4	150	50
SD046UF200AU35	200	46	1	40	0.875	2	150	35
SD050UF200AU35	200	50	2	50	0.93	2	150	35
SD058UF200AU35	200	58	2	65	0.94	2	150	35
SD065UF200AU35	200	65	3	80	0.9	2	150	35
SD071UF200AU35	200	71	5	100	0.94	2	150	35
SD046UF400AU35	400	46	1	40	1.2	2	150	35
SD050UF400AU35	400	50	2	50	1.15	2	150	35
SD065UF400AU35	400	65	5	80	1.2	2	150	35
SD071UF400AU35	400	71	5	100	1.25	2	150	35
SD084UF400AU50	400	84	10	125	1.2	2	150	50
SD195UF400AU100	400	195	50	400	1.2	4	150	100
SD046UF600AU50	600	46	1	40	1.67	2	150	50
SD050UF600AU50	600	50	1	50	1.22	2	150	50
SD065UF600AU50	600	65	4	80	1.45	2	150	50
SD079UF600AU50	600	79	6	125	1.67	2	150	50
SD084UF600AU50	600	84	8	125	1.5	2	150	50
SD098UF600AU50	600	98	8	200	1.67	2	150	50
SD050UF800AU70	800	50	2	50	1.67	2	150	70

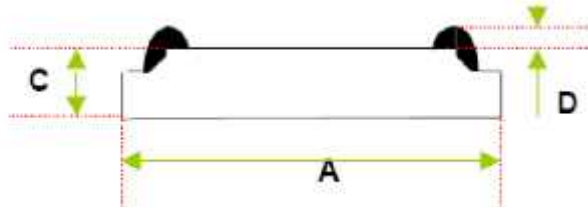
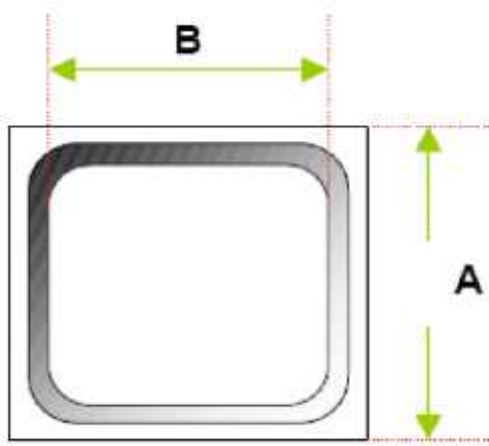
see notes overleaf

Ultrafast-Mesa



- ① Forward peak pulse current for a cycle, 8.3 ms, Sine pulse.
- ② T_{rr} is in $I_F=0.5A, I_R=1.0A, I_{REC}=0.25A$.
- ③ Catalog P/N is SDXXXUFXXA: A means bottom side metalization is Au/ Top side metalization is Al. Catalog P/N is SDXXXUFXXAU: Au means bottom side metalization is Au/ Top side metalization is Au.

Chip Mechanical Dimensions: In mil(mm)



SDXXXUFXXA: Top Al($5.0 \pm 0.5 \mu\text{m}$), Top Anode.,
Bottom Ni-Au($1.35 \pm 0.2 \mu\text{m}$), Bottom
Cathode.

SDXXXUFXXAU: Top Ni $>3000\text{\AA}$ Au $>200\text{\AA}$, Top Anode.
Bottom Ni $>3000\text{\AA}$ Au $>200\text{\AA}$, Bottom
Cathode.

Chip Size Code	A	B(Min.)	C	D(Max.)
mil	mil	mil	mil	mil
46	46 ± 2	26	11.5 ± 2	2
50	50 ± 2	28	11.5 ± 2	2
58	58 ± 2	36	11.5 ± 2	2
65	65 ± 2	42	11.5 ± 2	2
71	71 ± 2	46	11.5 ± 2	2
79	79 ± 2	57	11.5 ± 2	2
84	82 ± 2	60	11.5 ± 2	2
98	98 ± 2	73	11.5 ± 2	2
115	115 ± 2	93	11.5 ± 2	2
130	130 ± 2	108	11.5 ± 2	2
132	130 ± 2	108	11.5 ± 2	2
180	180 ± 2	154	11.5 ± 2	2
195	195 ± 2	161	11.5 ± 2	2

Ultrafast-Planar



Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Max. Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage@ IO (VFM)		Max. Reverse Leakage Current @ VFM (IR)		Max. Junction Temperature (T _j)	Max. Reverse Recovery Time (T _{rr}) ^②
					25°C	125°C	25°C	125°C		
	V	mil	A	A	V	V	μA	mA	°C	ns
UF07220035	200	72	5	80	1	0.96	5	1	150	35
UF08020035	200	80	5	80	1	0.96	5	1	150	35
UF10020035	200	100	10	120	1	0.96	10	1	150	35
UF12020035	200	120	15	160	1	0.96	10	1	150	35
UF15020035	200	150	30	250	1	0.96	20	2	150	35
UF07230045	300	72	5	80	1.25	1.21	5	1	150	45
UF08030045	300	80	5	80	1.25	1.21	5	1	150	45
UF10030045	300	100	10	120	1.25	1.21	10	1	150	45
UF15030045	300	150	30	250	1.25	1.21	20	2	150	45
UF07240045	400	72	5	80	1.25	1.21	5	1	150	45
UF08040045	400	80	5	80	1.25	1.21	5	1	150	45
UF10040045	400	100	10	120	1.25	1.21	10	1	150	45
UF15040045	400	150	30	250	1.35	1.31	20	2	150	45
UF07260050	600	72	5	80	1.45	1.41	5	1	150	50
UF08060050	600	80	5	80	1.45	1.41	5	1	150	50
UF09060050	600	90	10	100	1.45	1.41	10	1	150	50
UF12060050	600	120	15	120	1.45	1.41	10	1	150	50
UF17560050	600	175	30	250	1.45	1.41	20	2	150	50
UF20060050	600	200	60	500	1.45	1.41	40	4	150	50
UF0901000100	1000	90	5	60	2.00	1.50	10	1.5	150	100
UF1051000100	1000	100	7.5	90	2.00	1.50	15	2	150	100
UF1201000100	1000	120	10	100	2.00	1.50	20	3	150	100
UF1601000100	1000	120 X 160	15	120	2.00	1.50	30	5	150	100
UF1501000100	1000	150	20	150	2.00	1.50	40	6	150	100
UF1751000100	1000	175	30	250	2.00	1.50	50	10	150	100
UF2001000100	1000	200	45	500	2.00	1.50	60	15	150	100
UF2501000100	1000	250	75	700	2.00	1.50	100	25	150	100
UF2751000100	1000	275	90	1000	2.00	1.50	150	30	150	100
UF0901200100	1200	90	5	60	2.25	1.6 ^③	55	0.5	150	100
UF1051200100	1200	100	7.5	90	2.25	1.6 ^③	60	0.8	150	100
UF1201200100	1200	120	10	100	2.25	1.6 ^③	100	1	150	100
UF1601200100	1200	120 X 160	15	120	2.25	1.6 ^③	150	1.5	150	100

Catalog P/N	Peak Inverse Voltage (VRM)	Chip size	Max. Average Forward Current (I _o)	Max. Forward Surge Current (8.3ms) (IFSM) ^①	Max. Forward Voltage@ IO (VFM)		Max. Reverse Leakage Current @ VFM (IR)		Max. Junction Temperature (T _J)	Max. Reverse Recovery Time (T _{rr}) ^②
					25°C	125°C	25°C	125°C		
	V	mil	A	A	V	V	μA	mA	°C	ns
UF1501200100	1200	150	20	150	2.25	1.6 ^③	180	2	150	100
UF1751200100	1200	175	30	250	2.25	1.6 ^③	200	3	150	100
UF2001200100	1200	200	45	500	2.25	1.6 ^③	300	5	150	100
UF2501200100	1200	250	75	700	2.25	1.6 ^③	550	7	150	100
UF2751200100	1200	275	90	1000	2.25	1.6 ^③	800	10	150	100

① Forward peak pulse current for a cycle, 8.3 ms, Sine pulse.

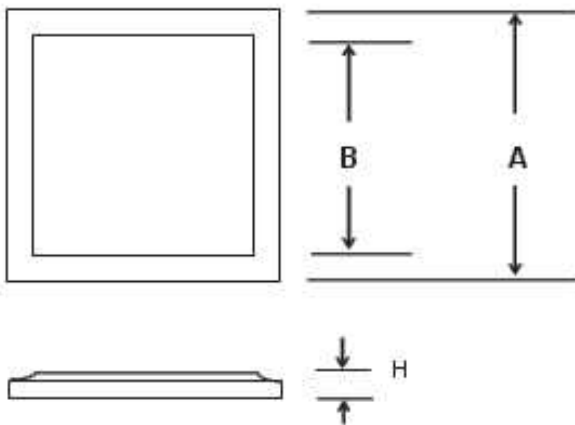
② T_{rr} is in IF=0.5A, IR=1.0A, IR=0.25A.

③ T_J =150°C

④ Chip top side metallization is Al, Bottom side metallization is Ag.

⑤ Catalog P/N is UFXXX◇◇◇△△: XXX means chip size; ◇◇◇ means reverse voltage; △△ means reverse recovery time

Chip Mechanical Dimensions: In mil(mm)



Bottom side metallization is Ag: Thickness 5 Å minimum.

Top side metallization is Al: Thickness 25 Å minimum.
Bottom side is cathode, top side is anode.

Chip thickness H=9 ± 1(0.23 ± 0.026) (It can be customized according to customer requirement)

Catalog P/N	A	B
	mil	mil
UF07220035	70 ± 2	64 ± 2
UF08020035	78 ± 2	71 ± 2
UF10020035	98 ± 2	86 ± 2
UF12020035	118 ± 2	108 ± 2
UF15020035	148 ± 2	141 ± 2
UF07230045	70 ± 2	64 ± 2
UF08030045	78 ± 2	71 ± 2
UF10030045	98 ± 2	86 ± 2
UF15030045	148 ± 2	141 ± 2
UF07240045	70 ± 2	64 ± 2
UF08040045	78 ± 2	71 ± 2
UF10040045	98 ± 2	86 ± 2
UF15040045	148 ± 2	141 ± 2
UF07260050	70 ± 2	39 ± 2
UF08060050	78 ± 2	46 ± 2
UF09060050	88 ± 2	60 ± 2
UF12060050	118 ± 2	83 ± 2
UF17560050	173 ± 2	138 ± 2
UF20060050	198 ± 2	163 ± 2
UF0901000100	88 ± 2	43 ± 2
UF1051000100	103 ± 2	56 ± 2
UF1201000100	118 ± 2	71 ± 2
UF1601000100	(118 ± 2) X (158 ± 2)	(71 ± 2) X (111 ± 2)
UF1501000100	148 ± 2	101 ± 2
UF1751000100	173 ± 2	125 ± 2
UF2001200100	198 ± 2	150 ± 2
UF2501000100	248 ± 2	200 ± 2
UF2751000100	273 ± 2	225 ± 2
UF0901200100	88 ± 2	40 ± 2
UF1051200100	103 ± 2	53 ± 2
UF1201200100	118 ± 2	68 ± 2
UF1601200100	(118 ± 2) X (158 ± 2)	(68 ± 2) X (108 ± 2)
UF1501200100	148 ± 2	98 ± 2
UF1751200100	173 ± 2	122 ± 2
UF2001200100	198 ± 2	147 ± 2
UF2501200100	248 ± 2	197 ± 2
UF2751200100	273 ± 2	222 ± 2

Notes



A large, empty rectangular box with a black border, intended for handwritten notes.

A large empty rectangular box with a black border, intended for handwritten notes.



SMC

DIODE SOLUTIONS
15 YEARS OF EXCELLENCE

SANGDEST MICROELECTRONICS
(NANJING) CO. LTD

19# WEIQI STREET,
AIRPORT DEVELOPMENT ZONE,
JIANGNING DISTRICT,
NANJING, CHINA

TEL:// +86-25-87123907

FAX:// +86-25-87123900

WWW.SMC-DIODES.COM

SALES@SMC-DIODES.COM

SALES REPRESENTATIVE: