

GPP TRANSIENT VOLTAGE SUPPRESSOR
5000 WATT PEAK POWER 8.0 WATTS STEADY STATE

FEATURES

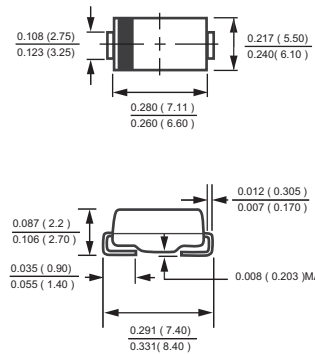
- * Plastic package has underwriters laboratory
- * Glass passivated chip construction
- * 5000 watt surge capability at 1ms
- * Excellent clamping capability
- * Low zener impedance
- * Fast response time
- * Halogen-free

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load,
For capacitive load, derate current by 20%.



SMC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At TA = 25°C unless otherwise noted)

RATINGS	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation with a 10/1000uS waveform (Note 1)	PPPM	Minimum 5000	Watts
Peak Pulse Current with a 10/1000uS waveform (Note 1)	IPPM	23.9	Amps
Power Dissipation On Infinite Heatsink at TL= 75°C	PD	6.5	Watts
Peak Forward Surge Current, 8.3ms single half sine wave-superimposed on rated load(JEDEC METHOD) (Note 3)	IFSM	300	Amps
Typical Current Squared Time	I ² T	374	A ² S
Instantaneous Forward Voltage at 100A, (Note 2)	VF	3.5/6.5	Volts
Typical Thermal Resistance	RθJA	75	°C/W
Typical Thermal Resistance	RθJL	15	
Operating and Storage Temperature Range	TJ, TSTG	-55 to + 150	°C

- NOTES : 1. Non-repetitive current pulse, per Fig.5 and derated above TA = 25°C per Fig.1.
 2. VF<3.5V for devices of VBR<200V and VF<6.5V for devices of VBR>200V .
 3. Measured on 8.3mS single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum.

2020-11/61
REV:D

TYPE		Marking Code		Reverse Stand-off Voltage	Breakdown Voltage Vbr@ IT		Test current	Maximum Clamping Voltage@	Max. Peak Pulse Current	Max. Reverse Leak
Unidirectional	Bidirectional	UNI	BI	Vrwm (V)	Min (V)	Max (V)	IT(mA)	Vc Max(V)	Ipp(A)	IR (uA)
5.0SMDJ22A	5.0SMDJ22CA	5PEX	5BEX	22	24.4	26.9	1	35.5	141	5
5.0SMDJ24A	5.0SMDJ24CA	5PEZ	5BEZ	24	26.7	29.5	1	38.9	129	2
5.0SMDJ26A	5.0SMDJ26CA	5PFE	5BFE	26	28.9	31.9	1	42.1	119	2
5.0SMDJ28A	5.0SMDJ28CA	5PFG	5BFG	28	31.1	34.4	1	45.4	110	2
5.0SMDJ30A	5.0SMDJ30CA	5PFK	5BFK	30	33.3	36.8	1	48.4	103	2
5.0SMDJ33A	5.0SMDJ33CA	5PFM	5BFM	33	36.7	40.6	1	53.3	93.9	2
5.0SMDJ36A	5.0SMDJ36CA	5PFP	5BFP	36	40	44.2	1	58.1	86.1	2
5.0SMDJ40A	5.0SMDJ40CA	5PR	5BR	40	44.4	49.1	1	64.5	77.5	2
5.0SMDJ43A	5.0SMDJ43CA	5PFT	5BFT	43	47.8	52.8	1	69.4	72.1	2
5.0SMDJ45A	5.0SMDJ45CA	5PFV	5BFV	45	50	55.3	1	72.7	68.8	2
5.0SMDJ48A	5.0SMDJ48CA	5PFX	5BFX	48	53.3	58.9	1	77.4	64.7	2
5.0SMDJ51A	5.0SMDJ51CA	5PFZ	5BFZ	51	56.7	62.7	1	82.4	60.7	2
5.0SMDJ54A	5.0SMDJ54CA	5PGE	5BGE	54	60	66.3	1	87.1	57.5	2
5.0SMDJ58A	5.0SMDJ58CA	5PGG	5BGG	58	64.4	71.2	1	93.6	53.5	2
5.0SMDJ60A	5.0SMDJ60CA	5PGK	5BGK	60	66.7	73.7	1	96.8	51.7	2
5.0SMDJ64A	5.0SMDJ64CA	5PGM	5BGM	64	71.1	78.6	1	103	48.6	2
5.0SMDJ70A	5.0SMDJ70CA	5PGP	5BGP	70	77.8	86	1	113	44.3	2
5.0SMDJ75A	5.0SMDJ75CA	5PGR	5BGR	75	83.3	92.1	1	121	41.4	2
5.0SMDJ78A	5.0SMDJ78CA	5PGT	5BGT	78	86.7	95.8	1	126	39.7	2
5.0SMDJ85A	5.0SMDJ85CA	5PGV	5BGV	85	94.4	104	1	137	36.5	2
5.0SMDJ90A	5.0SMDJ90CA	5PGX	5BGX	90	100	111	1	146	34.3	2
5.0SMDJ100A	5.0SMDJ100CA	5PGZ	5BGZ	100	111	123	1	162	30.9	2
5.0SMDJ110A	5.0SMDJ110CA	5PHE	5BHE	110	122	135	1	177	28.3	2
5.0SMDJ120A	5.0SMDJ120CA	5PHG	5BHG	120	133	147	1	193	26	2
5.0SMDJ130A	5.0SMDJ130CA	5PHK	5BHK	130	144	159	1	209	24	2
5.0SMDJ150A	5.0SMDJ150CA	5PHM	5BHM	150	167	185	1	243	20.6	2
5.0SMDJ160A	5.0SMDJ160CA	5PHP	5BHP	160	178	197	1	259	19.3	2
5.0SMDJ170A	5.0SMDJ170CA	5PHR	5BHR	170	189	209	1	275	18.2	2

RATING AND CHARACTERISTICS CURVES (5.0SMDJ SERIES)

Fig 1: Peal Pulse Power Rating Curve

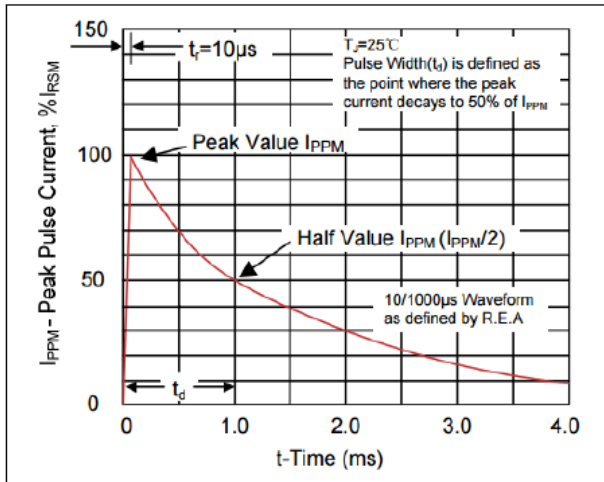


Fig 2: Pulse Derating Curve

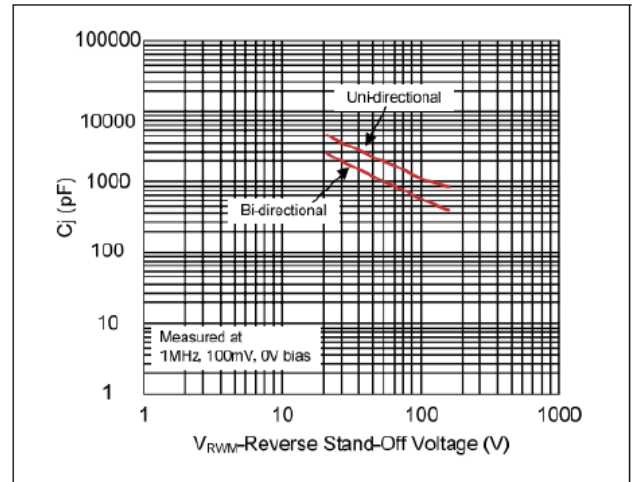


Fig 3: Pulse Waveform

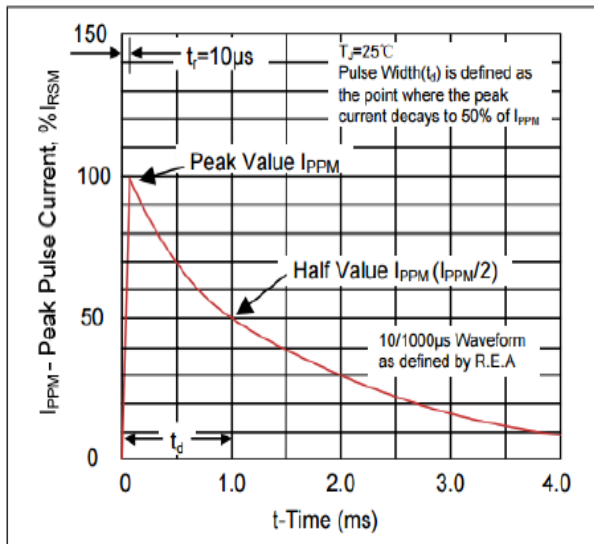


Fig 4: Typical Junction Capacitance

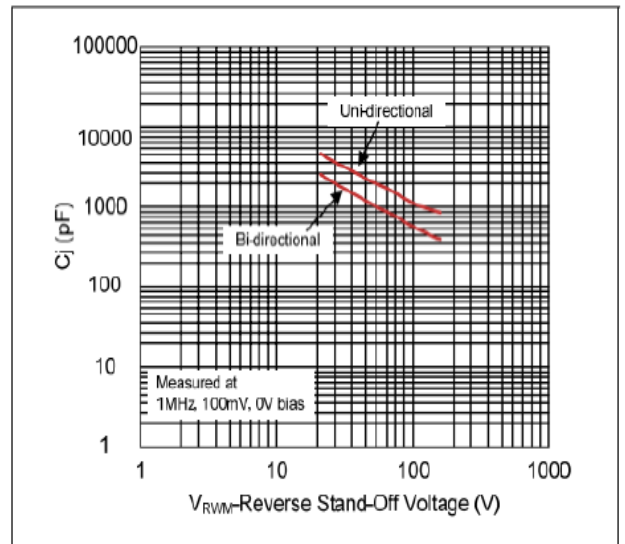


Fig 5: Steady State Power Dissipation Derating Curve

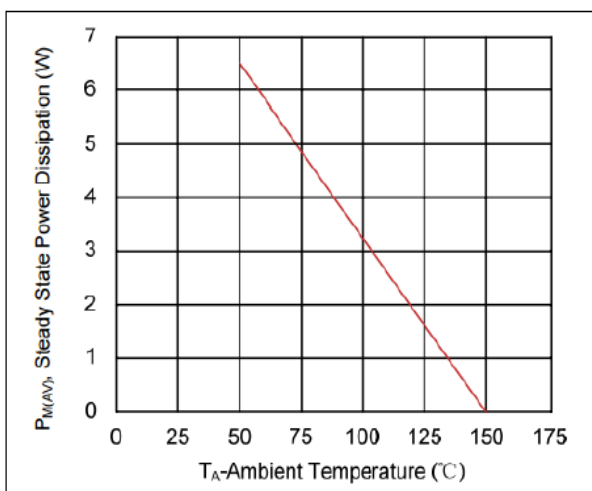
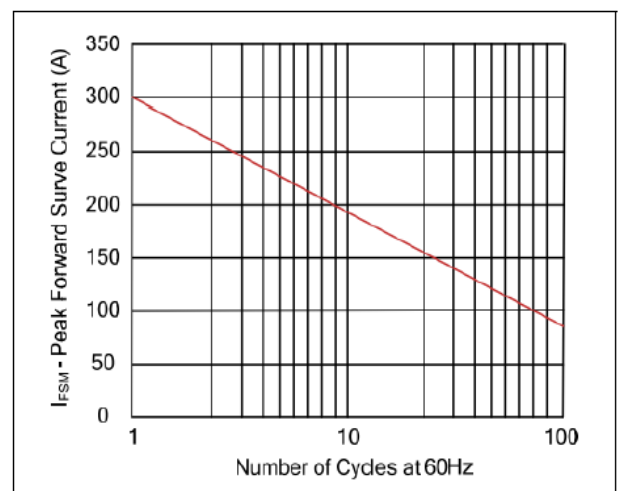
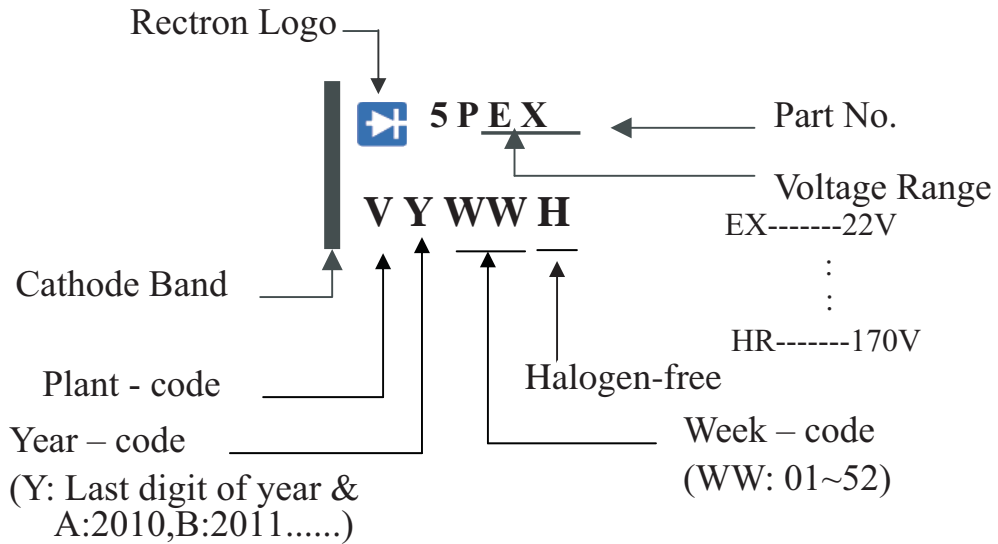


Fig 6: Maximum Non-repetitive Forward Surge Current Uni-directional Only

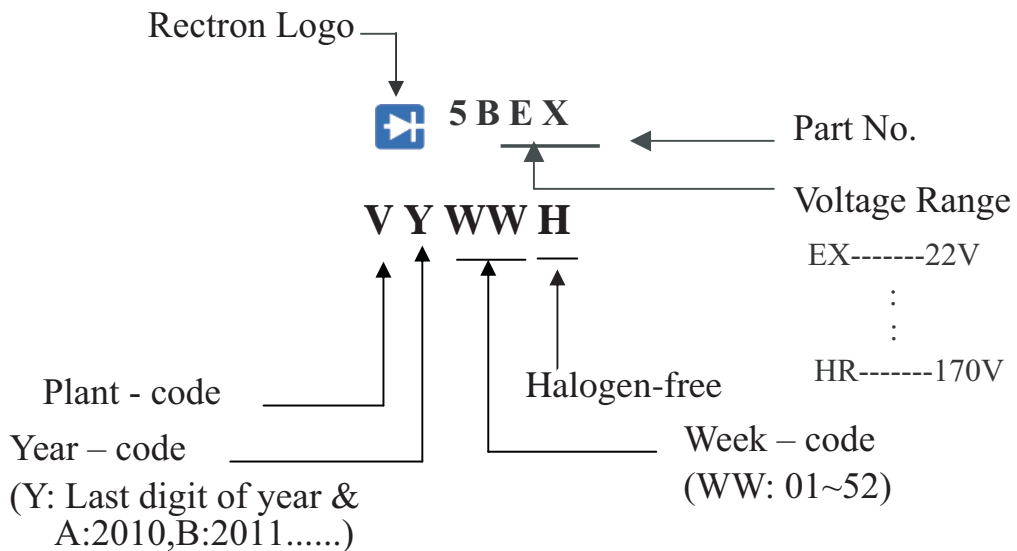


Marking on the body

1) Unidirectional



2) Bidirectional



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SMC	-W/-T	3,000	3,000	---	---	330	360*355*360	24,000	11.50

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