

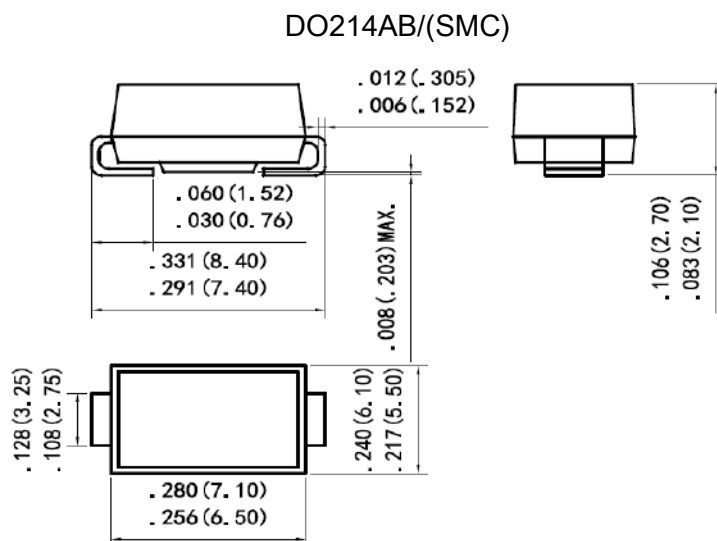
## Surface Mount Transient Voltage Suppressor Rectifiers

### Features:

- Glass passivated chip
- 3000 W peak pulse power capability with a 10/1000 us waveform, repetitive rate (duty cycle):0.01 %
- Excellent clamping capability
- Low reverse leakage
- Very fast response time
- Lead and body according with RoHS standard

### Mechanical Data:

- Case: DO214AB/(SMC) Molded plastic
- Lead: Solderable per MIL-STD-750, method 2026
- Epoxy: UL 94V-0 rate flame retardant
- Polarity: Color band denotes cathode end except Bipolar
- Mounting position: Any



Unit: inch (mm)

Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform <sup>(1)</sup>	$P_{PP}$	3000	W
Peak pulse current with a 10/1000 us waveform <sup>(1)</sup>	$I_{PP}$	See Next Table	A
Power dissipation on infinite heatsink at $T_L = 75^\circ\text{C}$	$P_D$	6.5	W
Peak forward surge current, 8.3 ms single half sine wave unidirectional only <sup>(2)</sup>	$I_{FSM}$	300	A
Maximum instantaneous forward voltage at 100 A for unidirectional only <sup>(3)</sup>	$V_F$	3.5	V
Storage temperature range	$T_{STG}$	-55 to +150	°C
Operating junction	$T_J$	-55 to +175	°C

Note:

1) Non-repetitive current pulse per Fig.5 and derated above  $T_A = 25^\circ\text{C}$  per Fig.1 ;

2) Measured on 8.3 ms single half sine-wave or equivalent square wave, duty cycle = 4 pulses per minute maximum ;

3)  $V_F < 3.5\text{V}$  for devices of  $V_{BR} < 200\text{V}$  .

Part Number		Device Marking Code		Reverse Stand-off Voltage	Breakdown Voltage $V_{BR}$ @ $I_T$		Test Current	Max. Clamping Voltage @ $I_{PP}$	Max. Peak Pulse Current	Max. Reverse Leakage @ $V_{RWM}$
UNI-POLAR	BI-POLAR	UNI	BI	$V_{RWM}(V)$	Min.(V)	Max.(V)	$I_T(mA)$	$V_{C MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SMDJ20A	SMDJ20CA	PEV	DEV	20.0	22.20	24.50	1	32.4	92.6	1
SMDJ22A	SMDJ22CA	PEX	DEX	22.0	24.40	26.90	1	35.5	84.5	1
SMDJ24A	SMDJ24CA	PEZ	DEZ	24.0	26.70	29.50	1	38.9	77.1	1
SMDJ26A	SMDJ26CA	PFE	DFE	26.0	28.90	31.90	1	42.1	71.3	1
SMDJ28A	SMDJ28CA	PFG	DFG	28.0	31.10	34.40	1	45.4	66.1	1
SMDJ30A	SMDJ30CA	PFK	DFK	30.0	33.50	36.80	1	48.4	62.0	1
SMDJ33A	SMDJ33CA	PFM	DFM	33.0	36.70	40.60	1	53.3	56.3	1
SMDJ36A	SMDJ36CA	PFP	DFP	36.0	40.00	44.20	1	58.1	51.6	1
SMDJ40A	SMDJ40CA	PFR	DFR	40.0	44.40	49.10	1	64.5	46.5	1
SMDJ43A	SMDJ43CA	PFT	DFT	43.0	47.80	52.80	1	69.4	43.2	1
SMDJ45A	SMDJ45CA	PFV	DFV	45.0	50.00	55.30	1	72.7	41.3	1
SMDJ48A	SMDJ48CA	PFX	DFX	48.0	53.30	58.90	1	77.4	38.8	1
SMDJ51A	SMDJ51CA	PFZ	DFZ	51.0	56.70	62.70	1	82.4	36.4	1
SMDJ54A	SMDJ54CA	PGE	DGE	54.0	60.00	66.30	1	87.1	34.4	1
SMDJ58A	SMDJ58CA	PGG	DGG	58.0	64.40	71.20	1	93.6	32.1	1
SMDJ60A	SMDJ60CA	PGK	DGK	60.0	66.70	73.70	1	96.8	31.0	1
SMDJ64A	SMDJ64CA	PGM	DGM	64.0	71.10	78.60	1	103.0	29.1	1
SMDJ70A	SMDJ70CA	PGP	DGP	70.0	77.80	86.00	1	113.0	26.5	1
SMDJ75A	SMDJ75CA	PGR	DGR	75.0	83.30	92.10	1	121.0	24.8	1
SMDJ78A	SMDJ78CA	PGT	DGT	78.0	86.70	95.80	1	126.0	23.8	1
SMDJ85A	SMDJ85CA	PGV	DGV	85.0	94.4	104.0	1	137.0	21.9	1
SMDJ90A	SMDJ90CA	PGX	DGX	90.0	100.0	111.0	1	146.0	20.5	1
SMDJ100A	SMDJ100CA	PGZ	DGZ	100.0	111.0	123.0	1	162.0	18.5	1
SMDJ110A	SMDJ110CA	PHE	DHE	110.0	122.0	135.0	1	177.0	16.9	1
SMDJ120A	SMDJ120CA	PHG	DHG	120.0	133.0	147.0	1	193.0	15.5	1
SMDJ130A	SMDJ130CA	PHK	DHK	130.0	144.0	159.0	1	209.0	14.4	1
SMDJ150A	SMDJ150CA	PHM	DHM	150.0	167.0	185.0	1	243.0	12.3	1

**Ratings and Characteristics Curves (TA=25°C unless otherwise noted)**

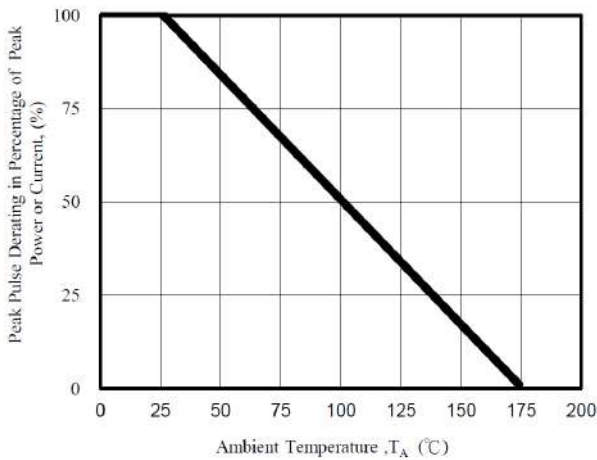


Fig. 1 - Pulse Derating Curve

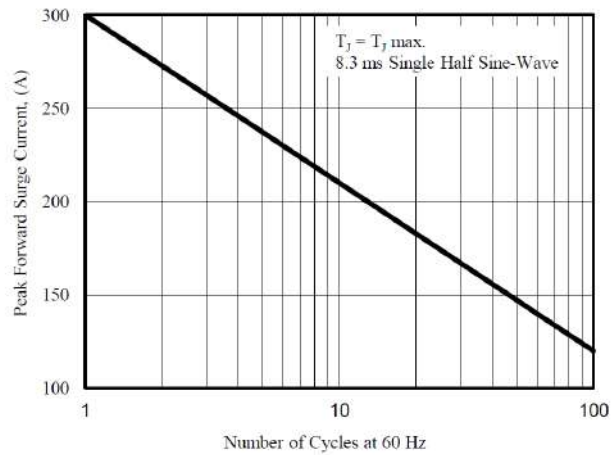


Fig. 2 - Maximum Non-Repetitive Surge Current

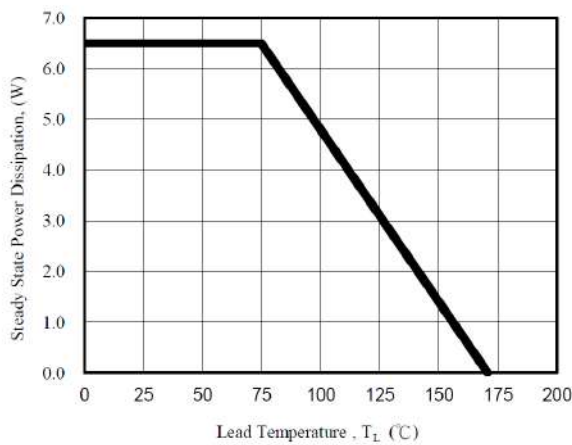


Fig. 3 - Steady State Power Derating Curve

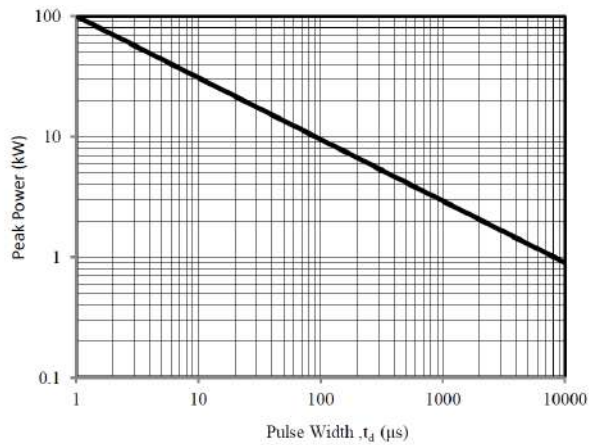


Fig. 4 - Peak Pulse Power Rating Curve

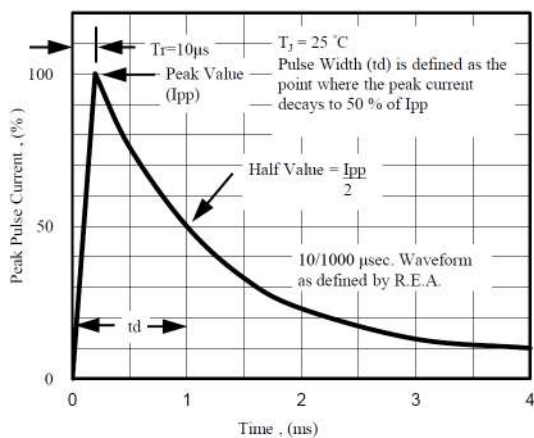


Fig. 5 - Pulse Waveform

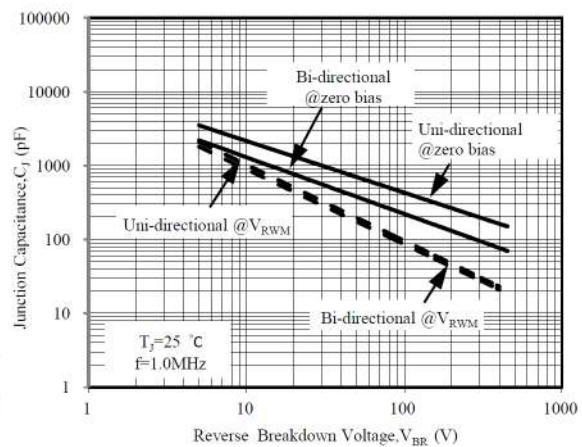


Fig. 6 - Typical Junction Capacitance