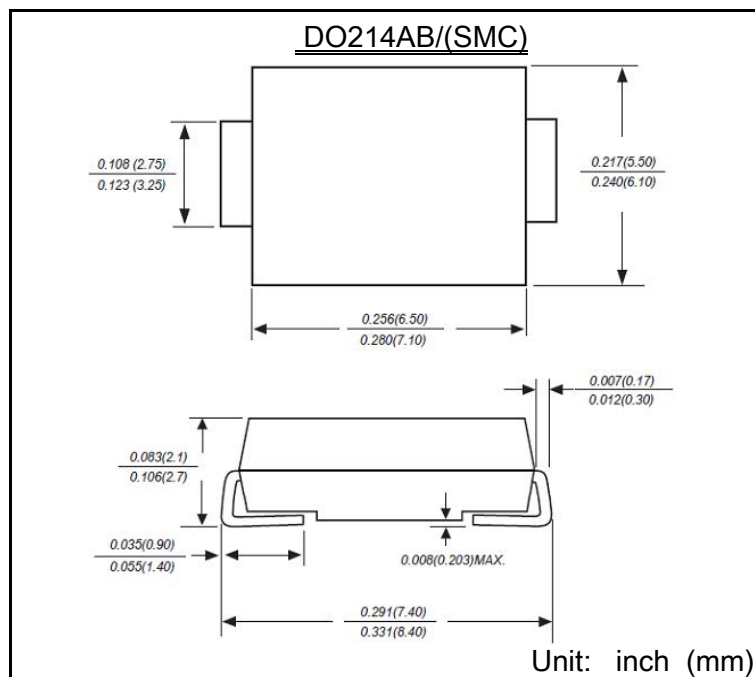




Features

- 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

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

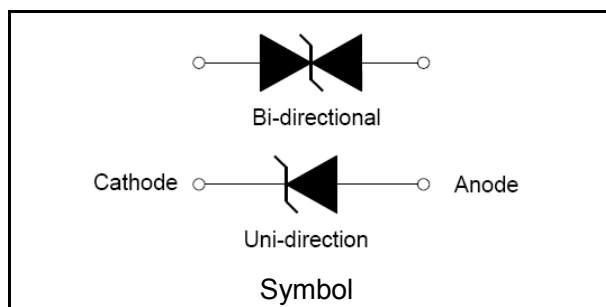
Parameter	Symbols	Value	Unit
Peak power dissipation with a 10/1000 us waveform ⁽¹⁾	P _{PP}	3000	W
Peak pulse current with a 10/1000 us waveform ⁽¹⁾	I _{PP}	See Next Table	A
Power dissipation on infinite heatsink at TL = 75 °C	P _D	6.5	W
Peak forward surge current, 8.3 ms single half sinewave unidirectional only ⁽²⁾	I _{FSM}	300	A
Maximum instantaneous forward voltage at 100 A for unidirectional only ⁽³⁾	V _F	3.5/6.5	V
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150	°C

Note:

1)Non-repetitive current pulse per Fig.5 and derated above TA= 25 °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<3.5V for devices of VBR<200V and V_F<6.5V for devices of VBR>201V.



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)	$I_T(mA)$	$V_{C MAX.}(V)$	$I_{PP}(A)$	$I_R(\mu A)$
SMDJ5.0AX	SMDJ5.0CAX	RDE	DDE	5.0	6.40	7.00	10	9.2	326.1	800
SMDJ6.0AX	SMDJ6.0CAX	RDG	DDG	6.0	6.67	7.37	10	10.3	291.3	800
SMDJ6.5AX	SMDJ6.5CAX	RDK	DDK	6.5	7.22	7.98	10	11.2	267.9	500
SMDJ7.0AX	SMDJ7.0CAX	PDM	DDM	7.0	7.78	8.60	10	12.0	250.0	200
SMDJ7.5AX	SMDJ7.5CAX	PDP	DDP	7.5	8.33	9.21	1	12.9	232.6	100
SMDJ8.0AX	SMDJ8.0CAX	PDR	DDR	8.0	8.89	9.83	1	13.6	220.6	50
SMDJ8.5AX	SMDJ8.5CAX	PDT	DDT	8.5	9.44	10.40	1	14.4	208.3	20
SMDJ9.0AX	SMDJ9.0CAX	PDV	DDV	9.0	10.00	11.10	1	15.4	194.8	10
SMDJ10AX	SMDJ10CAX	PDX	DDX	10.0	11.10	12.30	1	17.0	176.5	5
SMDJ11AX	SMDJ11CAX	PDZ	DDZ	11.0	12.20	13.50	1	18.2	164.8	1
SMDJ12AX	SMDJ12CAX	PEE	DEE	12.0	13.30	14.70	1	19.9	150.8	1
SMDJ13AX	SMDJ13CAX	PEG	DEG	13.0	14.40	15.90	1	21.5	139.5	1
SMDJ14AX	SMDJ14CAX	PEK	DEK	14.0	15.60	17.20	1	23.2	129.3	1
SMDJ15AX	SMDJ15CAX	PEM	DEM	15.0	16.70	18.50	1	24.4	123.0	1
SMDJ16AX	SMDJ16CAX	PEP	DEP	16.0	17.80	19.70	1	26.0	115.4	1
SMDJ17AX	SMDJ17CAX	PER	DER	17.0	18.90	20.90	1	27.6	108.7	1
SMDJ18AX	SMDJ18CAX	PET	DET	18.0	20.00	22.10	1	29.2	102.7	1
SMDJ20AX	SMDJ20CAX	PEV	DEV	20.0	22.20	24.50	1	32.4	92.6	1
SMDJ22AX	SMDJ22CAX	PEX	DEX	22.0	24.40	26.90	1	35.5	84.5	1
SMDJ24AX	SMDJ24CAX	PEZ	DEZ	24.0	26.70	29.50	1	38.9	77.1	1
SMDJ26AX	SMDJ26CAX	PFE	DFE	26.0	28.90	31.90	1	42.1	71.3	1
SMDJ28AX	SMDJ28CAX	PFG	DFG	28.0	31.10	34.40	1	45.4	66.1	1
SMDJ30AX	SMDJ30CAX	PFK	DFK	30.0	33.50	36.80	1	48.4	62.0	1
SMDJ33AX	SMDJ33CAX	PFM	DFM	33.0	36.70	40.60	1	53.3	56.3	1
SMDJ36AX	SMDJ36CAX	PFP	DFP	36.0	40.00	44.20	1	58.1	51.6	1
SMDJ40AX	SMDJ40CAX	PFR	DFR	40.0	44.40	49.10	1	64.5	46.5	1
SMDJ43AX	SMDJ43CAX	PFT	DFT	43.0	47.80	52.80	1	69.4	43.2	1
SMDJ45AX	SMDJ45CAX	PFV	DFV	45.0	50.00	55.30	1	72.7	41.3	1
SMDJ48AX	SMDJ48CAX	PFX	DFX	48.0	53.30	58.90	1	77.4	38.8	1
SMDJ51AX	SMDJ51CAX	PFZ	DFZ	51.0	56.70	62.70	1	82.4	36.4	1
SMDJ54AX	SMDJ54CAX	PGE	DGE	54.0	60.00	66.30	1	87.1	34.4	1
SMDJ58AX	SMDJ58CAX	PGG	DGG	58.0	64.40	71.20	1	93.6	32.1	1
SMDJ60AX	SMDJ60CAX	PGK	DGK	60.0	66.70	73.70	1	96.8	31.0	1
SMDJ64AX	SMDJ64CAX	PGM	DGM	64.0	71.10	78.60	1	103.0	29.1	1
SMDJ70AX	SMDJ70CAX	PGP	DGP	70.0	77.80	86.00	1	113.0	26.5	1
SMDJ75AX	SMDJ75CAX	PGR	DGR	75.0	83.30	92.10	1	121.0	24.8	1
SMDJ78AX	SMDJ78CAX	PGT	DGT	78.0	86.70	95.80	1	126.0	23.8	1
SMDJ85AX	SMDJ85CAX	PGV	DGV	85.0	94.4	104.0	1	137.0	21.9	1
SMDJ90AX	SMDJ90CAX	PGX	DGX	90.0	100.0	111.0	1	146.0	20.5	1
SMDJ100AX	SMDJ100CAX	PGZ	DGZ	100.0	111.0	123.0	1	162.0	18.5	1
SMDJ110AX	SMDJ110CAX	PHE	DHE	110.0	122.0	135.0	1	177.0	16.9	1
SMDJ120AX	SMDJ120CAX	PHG	DHG	120.0	133.0	147.0	1	193.0	15.5	1
SMDJ130AX	SMDJ130CAX	PHK	DHK	130.0	144.0	159.0	1	209.0	14.4	1
SMDJ150AX	SMDJ150CAX	PHM	DHM	150.0	167.0	185.0	1	243.0	12.3	1
SMDJ160AX	SMDJ160CAX	PHP	DHP	160.0	178.0	197.0	1	259.0	11.6	1
SMDJ170AX	SMDJ170CAX	PHR	DHR	170.0	189.0	209.0	1	275.0	10.9	1
SMDJ180AX	SMDJ180CAX	PHT	DHT	180.0	201.0	222.0	1	292.0	10.3	1
SMDJ190AX	SMDJ190CAX	PHV	DHV	190.0	209.0	243.0	1	308.0	9.7	1
SMDJ200AX	SMDJ200CAX	PHX	DHX	200.0	224.0	247.0	1	324.0	9.3	1
SMDJ210AX	SMDJ210CAX	PHZ	DHZ	210.0	231.0	268.0	1	340.0	8.8	1
SMDJ220AX	SMDJ220CAX	PIE	DIE	220.0	246.0	272.0	1	356.0	8.4	1
SMDJ250AX	SMDJ250CAX	PIG	DIG	250.0	279.0	309.0	1	405.0	7.4	1
SMDJ300AX	SMDJ300CAX	PIK	DIK	300.0	335.0	371.0	1	486.0	6.2	1
SMDJ350AX	SMDJ350CAX	PIM	DIM	350.0	391.0	432.0	1	567.0	5.3	1
SMDJ400AX	SMDJ400CAX	PIP	DIP	400.0	447.0	494.0	1	648.0	4.6	1
SMDJ440AX	SMDJ440CAX	PIR	DIR	440.0	492.0	543.0	1	713.0	4.2	1

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

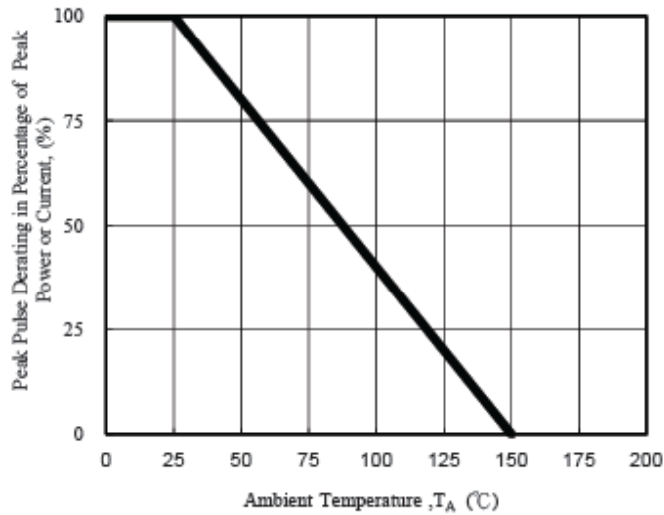


Fig. 1 - Pulse Derating Curve

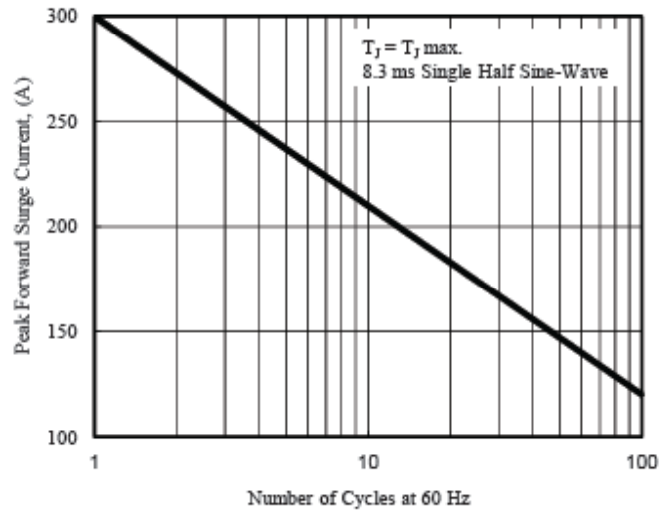


Fig. 2 - Maximum Non-Repetitive Surge Current

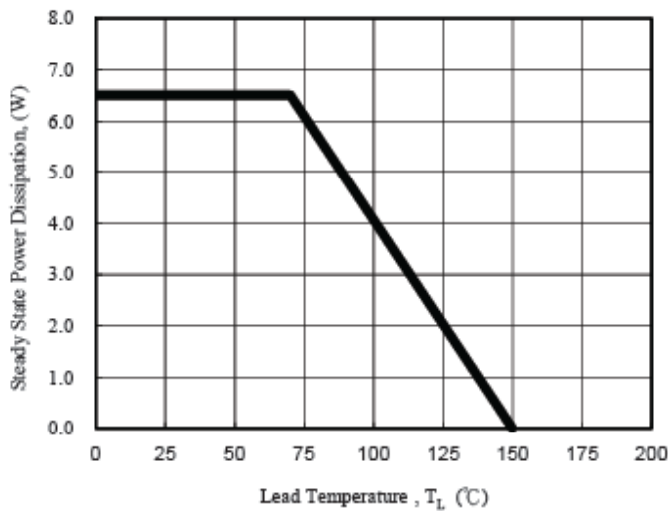


Fig. 3 - Steady State Power Derating Curve

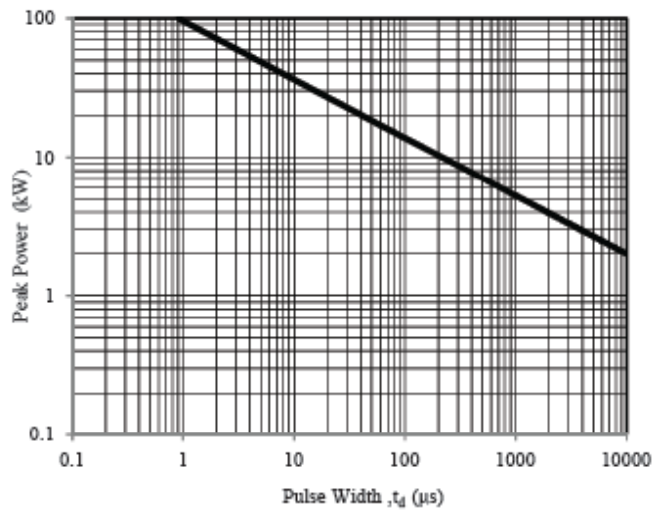


Fig. 4 - Peak Pulse Power Rating Curve

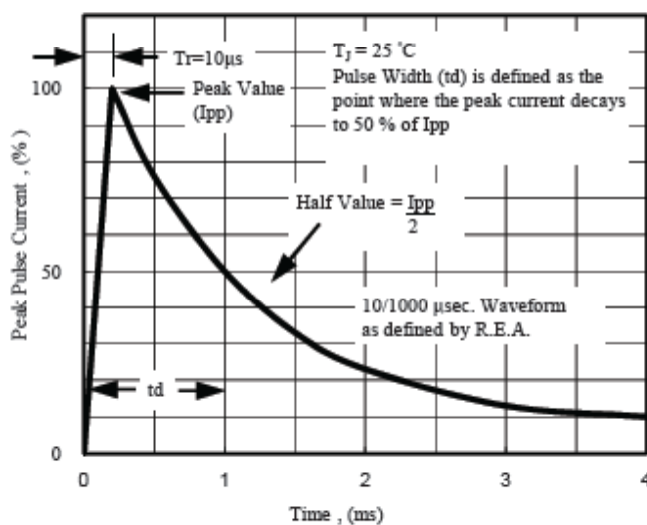


Fig. 5 - Pulse Waveform

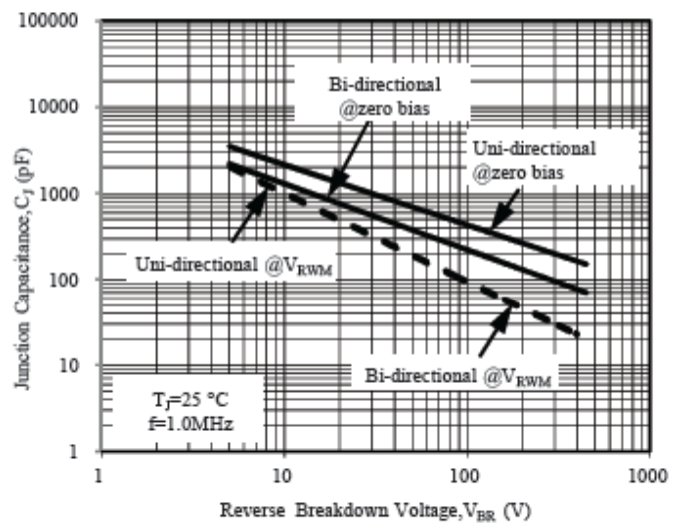
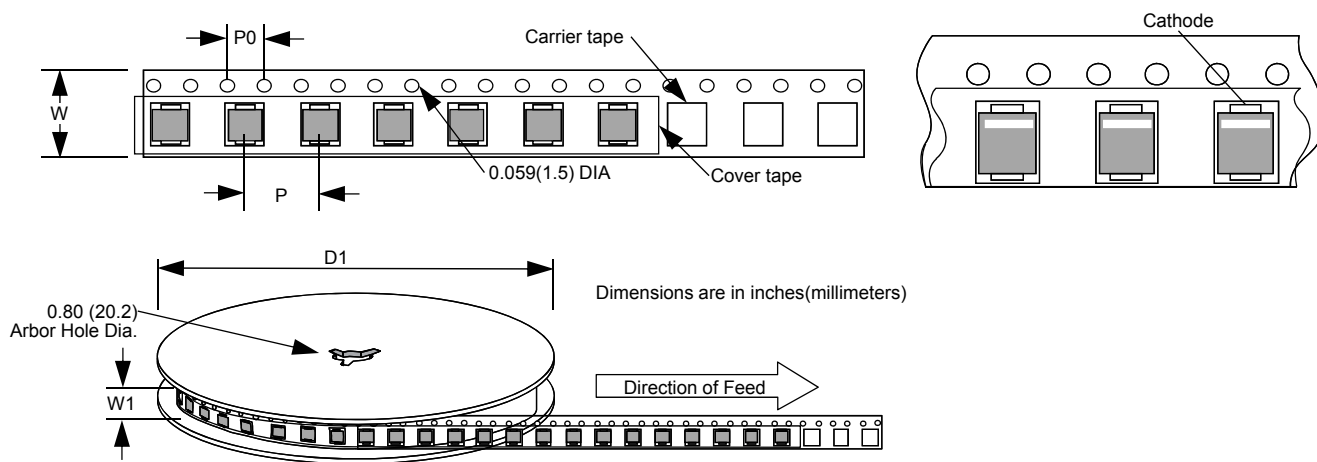


Fig. 6 - Typical Junction Capacitance

Reel and Tape



Dimension	Inches			Millimeters		
	MIN	NOM	MAX	MIN	NOM	MAX
P		0.315			8	
P0		0.157			4	
W		0.63			16	
W1		0.646			16.4	
D1		13			330.2	

Packing Options

Package	Packing Description	Packing Quantity
SMC	Tape/Reel, 13" reel	3000