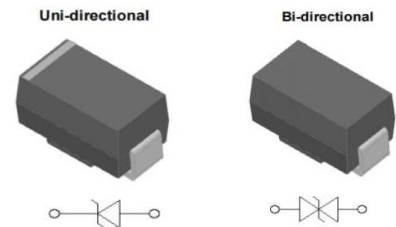


Transient Voltage Suppressors

FEATURES :

- For surface mounted applications
- 3000W peak pulse power capability on 10/1000 μ s waveform
- Low incremental surge resistance, excellent clamping capability
- Very fast response time
- High temperature soldering guaranteed: 260 $^{\circ}$ C/10 seconds
- RoHS compliant.



DO-214AB

MECHANICAL DATA :

- Case : Molded plastic body
- Polarity : Polarity symbol marking on body



MAXIMUM RATINGS (Ratings at 25 $^{\circ}$ C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A=25^{\circ}\text{C}$ by 10x1000 μ s waveform	P_{PPM}	3000	W
Power Dissipation on infinite heat sink at $T_A=50^{\circ}\text{C}$	$P_{M(AV)}$	6.5	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave	I_{FSM}	300	A
Maximum Instantaneous Forward Voltage at 0.2A for Unidirectional	V_F	1.2	V
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55~+150	$^{\circ}\text{C}$
Typical Thermal Resistance Junction to Lead	R_{Uj}	15	$^{\circ}\text{C/W}$
Typical Thermal Resistance Junction to Ambient	R_{UJA}	75	$^{\circ}\text{C/W}$

Electrical Characteristics

P/N		Marking		VR (V)	VBR @ IT (V)		IT (mA)	IR@ VR (μA)		Ipp (A)	VC@ Ipp (V)
Uni	Bi	Uni	Bi		MIN	MAX		Uni	Bi		
SMDJ5.0A	SMDJ5.0CA	RDE	DDE	5	6.4	7	10	500	1200	326.1	9.2
SMDJ6.0A	SMDJ6.0CA	RDG	DDG	6	6.67	7.37	10	500	1200	291.3	10.3
SMDJ6.5A	SMDJ6.5CA	RDK	DDK	6.5	7.22	7.98	10	200	400	267.9	11.2
SMDJ7.0A	SMDJ7.0CA	PDM	DDM	7	7.78	8.6	10	200	200	250	12
SMDJ7.5A	SMDJ7.5CA	PDP	DDP	7.5	8.33	9.21	1	80	150	232.6	12.9
SMDJ8.0A	SMDJ8.0CA	PDR	DDR	8	8.89	9.83	1	40	50	220.6	13.6
SMDJ8.5A	SMDJ8.5CA	PDT	DDT	8.5	9.44	10.4	1	6	30	208.3	14.4
SMDJ9.0A	SMDJ9.0CA	PDV	DDV	9	10	11.1	1	6	20	194.8	15.4
SMDJ10A	SMDJ10CA	PDX	DDX	10	11.1	12.3	1	2	4	176.5	17
SMDJ11A	SMDJ11CA	PDZ	DDZ	11	12.2	13.5	1	2	2	164.8	18.2
SMDJ12A	SMDJ12CA	PEE	DEE	12	13.3	14.7	1	2	2	150.8	19.9
SMDJ13A	SMDJ13CA	PEG	DEG	13	14.4	15.9	1	2	2	139.5	21.5
SMDJ14A	SMDJ14CA	PEK	DEK	14	15.6	17.2	1	2	2	129.3	23.2
SMDJ15A	SMDJ15CA	PEM	DEM	15	16.7	18.5	1	2	2	123	24.4
SMDJ16A	SMDJ16CA	PEP	DEP	16	17.8	19.7	1	1	1	115.4	26
SMDJ17A	SMDJ17CA	PER	DER	17	18.9	20.9	1	1	1	108.7	27.6
SMDJ18A	SMDJ18CA	PET	DET	18	20	22.1	1	1	1	102.7	29.2
SMDJ20A	SMDJ20CA	PEV	DEV	20	22.2	24.5	1	1	1	92.6	32.4
SMDJ22A	SMDJ22CA	PEX	DEX	22	24.4	26.9	1	1	1	84.5	35.5
SMDJ24A	SMDJ24CA	PEZ	DEZ	24	26.7	29.5	1	1	1	77.1	38.9
SMDJ26A	SMDJ26CA	PFE	DFE	26	28.9	31.9	1	1	1	71.3	42.1
SMDJ28A	SMDJ28CA	PFG	DFG	28	31.1	34.4	1	1	1	66.1	45.4
SMDJ30A	SMDJ30CA	PFK	DFK	30	33.3	36.8	1	1	1	62	48.4
SMDJ33A	SMDJ33CA	PFM	DFM	33	36.7	40.6	1	1	1	56.3	53.3
SMDJ36A	SMDJ36CA	PFP	DFP	36	40	44.2	1	1	1	51.6	58.1
SMDJ40A	SMDJ40CA	PFR	DFR	40	44.4	49.1	1	1	1	46.5	64.5
SMDJ43A	SMDJ43CA	PFT	DFT	43	47.8	52.8	1	1	1	43.2	69.4
SMDJ45A	SMDJ45CA	PFV	DFV	45	50	55.3	1	1	1	41.3	72.7
SMDJ48A	SMDJ48CA	PFX	DFX	48	53.3	58.9	1	1	1	38.8	77.4
SMDJ51A	SMDJ51CA	PFZ	DFZ	51	56.7	62.7	1	1	1	36.4	82.4
SMDJ54A	SMDJ54CA	RGE	DGE	54	60	66.3	1	1	1	34.4	87.1
SMDJ58A	SMDJ58CA	PGG	DGG	58	64.4	71.2	1	1	1	32.1	93.6
SMDJ60A	SMDJ60CA	PGK	DGK	60	66.7	73.7	1	1	1	31	96.8
SMDJ64A	SMDJ64CA	PGM	DGM	64	71.1	78.6	1	1	1	29.1	103
SMDJ70A	SMDJ70CA	PGP	DGP	70	77.8	86	1	1	1	26.5	113
SMDJ75A	SMDJ75CA	PGR	DGR	75	83.3	92.1	1	1	1	24.8	121
SMDJ78A	SMDJ78CA	PGT	DGT	78	86.7	95.8	1	1	1	23.8	126
SMDJ85A	SMDJ85CA	PGV	DGV	85	94.4	104	1	1	1	21.9	137
SMDJ90A	SMDJ90CA	PGX	DGX	90	100	111	1	1	1	20.5	146
SMDJ100A	SMDJ100CA	PGZ	DGZ	100	111	123	1	1	1	18.5	162
SMDJ110A	SMDJ110CA	PHE	DHE	110	122	135	1	1	1	16.9	177
SMDJ120A	SMDJ120CA	PHG	DHG	120	133	147	1	1	1	15.5	193
SMDJ130A	SMDJ130CA	PHK	DHK	130	144	159	1	1	1	14.4	209
SMDJ150A	SMDJ150CA	PHM	DHM	150	167	185	1	1	1	12.3	243
SMDJ160A	SMDJ160CA	PHP	DHP	160	178	197	1	1	1	11.6	259
SMDJ170A	SMDJ170CA	PHR	DHR	170	189	209	1	1	1	10.9	275

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

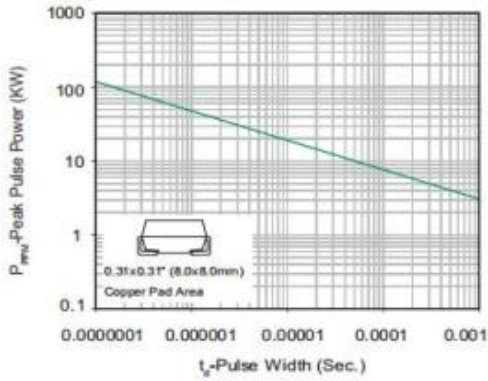


Figure 1. Peak Pulse Power Rating Curve

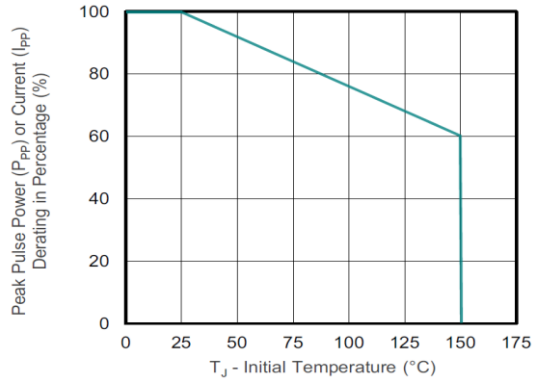


Figure 2. Pulse Derating Curve

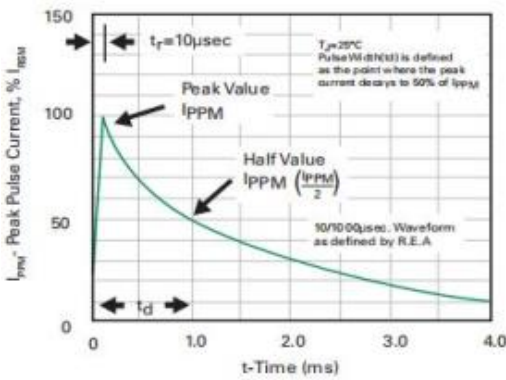


Figure 3. Pulse Waveform

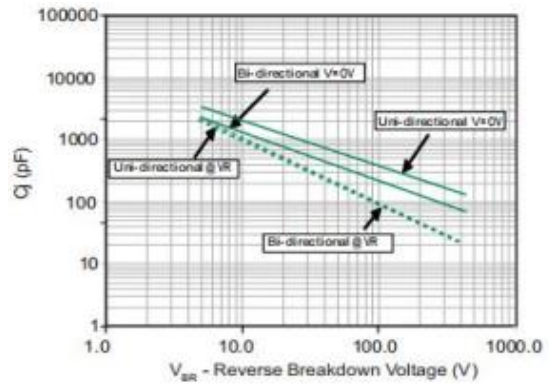


Figure 4. Typical Junction Capacitance

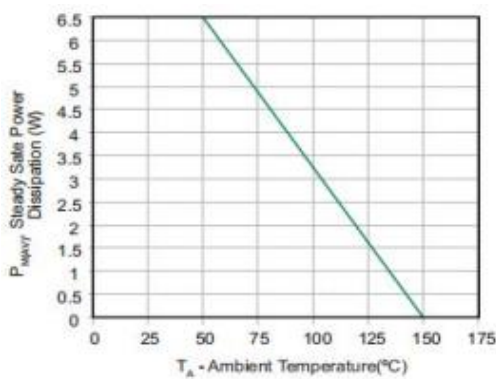


Figure 5. Steady State Power Dissipation Derating Curve

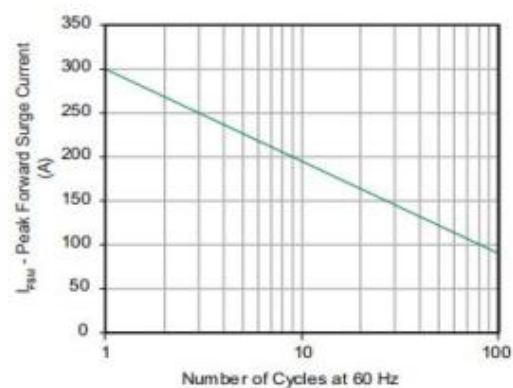
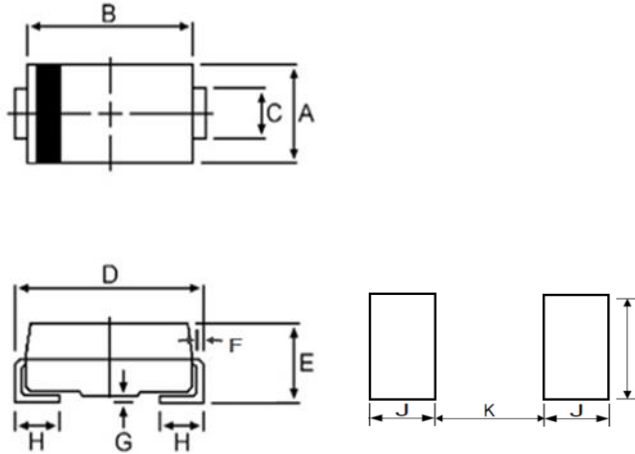


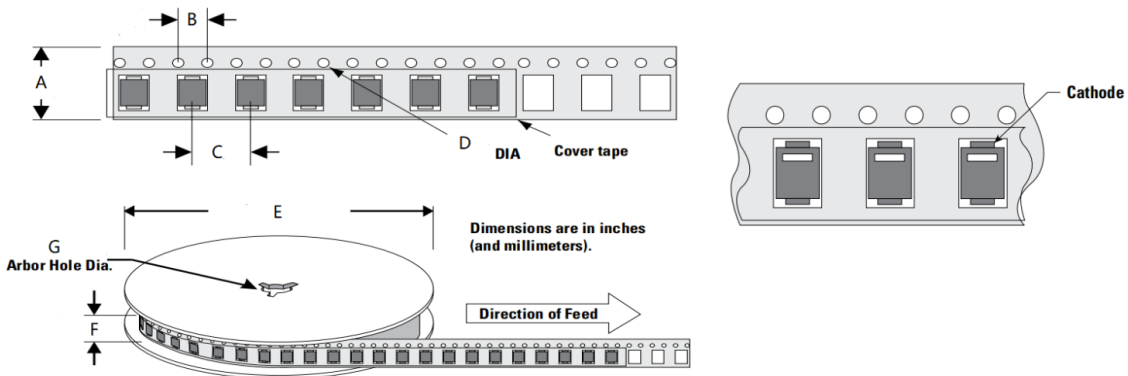
Figure 6. Maximum Non-Repetitive Forward Surge Current Uni-Directional Only

• DO-214AB Package outlines : Dimensions in millimeters



Dimensions	Millimeters	
	Min	Max
A	5.59	6.22
B	6.50	7.11
C	2.80	3.20
D	7.50	8.20
E	2.00	2.62
F	0.152	0.305
G	0.00	0.203
H	0.75	1.55
I	3.20	
J	1.52	
K		4.80

• Tape & Reel Information



Dimensions	Millimeters	
	Min	Max
A	16.00	16.10
B	3.90	4.10
C	7.90	8.10
D	1.40	1.60
E	329.0	331.0
F	16.50	18.00
G	13.00	14.50
A0	5.95	6.15
B0	8.21	8.41
K0	2.44	2.64
Aθ	--	8°
Bθ	--	5°

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