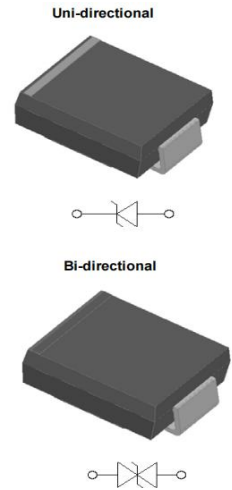


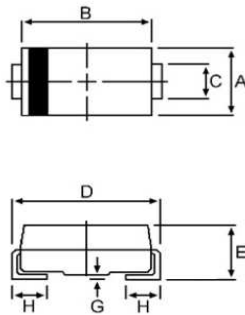
Product: SMDJ AU Series

Feature

- For surface mounted applications
- 3000W peak pulse power capability on 10/1000µs waveform
- Low incremental surge resistance, excellent clamping capability
- Very fast response time
- High temperature soldering guaranteed: 265°C/10 seconds
- Component in accordance to RoHS
- AEC-Q101



Dimension Figure



Dimensions	Millimeters		Inches	
	Min	Max	Min	Max
A	5.59	6.22	0.220	0.245
B	6.50	7.11	0.256	0.280
C	2.80	3.20	0.110	0.126
D	7.50	8.20	0.295	0.323
E	2.00	2.62	0.079	0.103
G	-	0.203	-	0.008
H	0.75	1.55	0.030	0.061

Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Pulse Power Dissipation at $T_A=25^{\circ}\text{C}$ by 10x1000µs 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 to 150	$^{\circ}\text{C}$
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	15	$^{\circ}\text{C/W}$
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	75	$^{\circ}\text{C/W}$

Electrical Characteristics

P/N		Marking		VR (V)	VBR @ IT (V)		IT (mA)	IR @ VR (μ A)		Ipp (A)	VC @ Ipp (V)
Uni	Bi	Uni	Bi		MIN	MAX		Uni	Bi		
SMDJ5.0A-AU	SMDJ5.0CA-AU	RDE	DDE	5	6.4	7	10	500	1200	326.1	9.2
SMDJ6.0A-AU	SMDJ6.0CA-AU	RDG	DDG	6	6.67	7.37	10	500	1200	291.3	10.3
SMDJ6.5A-AU	SMDJ6.5CA-AU	RDK	DDK	6.5	7.22	7.98	10	200	400	267.9	11.2
SMDJ7.0A-AU	SMDJ7.0CA-AU	PDM	DDM	7	7.78	8.6	10	200	200	250	12
SMDJ7.5A-AU	SMDJ7.5CA-AU	PDP	DDP	7.5	8.33	9.21	1	80	150	232.6	12.9
SMDJ8.0A-AU	SMDJ8.0CA-AU	PDR	DDR	8	8.89	9.83	1	40	50	220.6	13.6
SMDJ8.5A-AU	SMDJ8.5CA-AU	PDT	DDT	8.5	9.44	10.4	1	6	30	208.3	14.4
SMDJ9.0A-AU	SMDJ9.0CA-AU	PDV	DDV	9	10	11.1	1	6	20	194.8	15.4
SMDJ10A-AU	SMDJ10CA-AU	PDX	DDX	10	11.1	12.3	1	2	4	176.5	17
SMDJ11A-AU	SMDJ11CA-AU	PDZ	DDZ	11	12.2	13.5	1	2	2	164.8	18.2
SMDJ12A-AU	SMDJ12CA-AU	PEE	DEE	12	13.3	14.7	1	2	2	150.8	19.9
SMDJ13A-AU	SMDJ13CA-AU	PEG	DEG	13	14.4	15.9	1	2	2	139.5	21.5
SMDJ14A-AU	SMDJ14CA-AU	PEK	DEK	14	15.6	17.2	1	2	2	129.3	23.2
SMDJ15A-AU	SMDJ15CA-AU	PEM	DEM	15	16.7	18.5	1	2	2	123	24.4
SMDJ16A-AU	SMDJ16CA-AU	PEP	DEP	16	17.8	19.7	1	1	1	115.4	26
SMDJ17A-AU	SMDJ17CA-AU	PER	DER	17	18.9	20.9	1	1	1	108.7	27.6
SMDJ18A-AU	SMDJ18CA-AU	PET	DET	18	20	22.1	1	1	1	102.7	29.2
SMDJ20A-AU	SMDJ20CA-AU	PEV	DEV	20	22.2	24.5	1	1	1	92.6	32.4
SMDJ22A-AU	SMDJ22CA-AU	PEX	DEX	22	24.4	26.9	1	1	1	84.5	35.5
SMDJ24A-AU	SMDJ24CA-AU	PEZ	DEZ	24	26.7	29.5	1	1	1	77.1	38.9
SMDJ26A-AU	SMDJ26CA-AU	PFE	DFE	26	28.9	31.9	1	1	1	71.3	42.1
SMDJ28A-AU	SMDJ28CA-AU	PFG	DFG	28	31.1	34.4	1	1	1	66.1	45.4
SMDJ30A-AU	SMDJ30CA-AU	PFK	DFK	30	33.3	36.8	1	1	1	62	48.4
SMDJ33A-AU	SMDJ33CA-AU	PFM	DFM	33	36.7	40.6	1	1	1	56.3	53.3
SMDJ36A-AU	SMDJ36CA-AU	PFP	DFP	36	40	44.2	1	1	1	51.6	58.1
SMDJ40A-AU	SMDJ40CA-AU	PFR	DFR	40	44.4	49.1	1	1	1	46.5	64.5
SMDJ43A-AU	SMDJ43CA-AU	PFT	DFT	43	47.8	52.8	1	1	1	43.2	69.4
SMDJ45A-AU	SMDJ45CA-AU	PFV	DFV	45	50	55.3	1	1	1	41.3	72.7
SMDJ48A-AU	SMDJ48CA-AU	PFX	DFX	48	53.3	58.9	1	1	1	38.8	77.4
SMDJ51A-AU	SMDJ51CA-AU	PFZ	DFZ	51	56.7	62.7	1	1	1	36.4	82.4
SMDJ54A-AU	SMDJ54CA-AU	RGE	DGE	54	60	66.3	1	1	1	34.4	87.1
SMDJ58A-AU	SMDJ58CA-AU	PGG	DGG	58	64.4	71.2	1	1	1	32.1	93.6
SMDJ60A-AU	SMDJ60CA-AU	PGK	DGK	60	66.7	73.7	1	1	1	31	96.8
SMDJ64A-AU	SMDJ64CA-AU	PGM	DGM	64	71.1	78.6	1	1	1	29.1	103
SMDJ70A-AU	SMDJ70CA-AU	PGP	DGP	70	77.8	86	1	1	1	26.5	113
SMDJ75A-AU	SMDJ75CA-AU	PGR	DGR	75	83.3	92.1	1	1	1	24.8	121
SMDJ78A-AU	SMDJ78CA-AU	PGT	DGT	78	86.7	95.8	1	1	1	23.8	126
SMDJ85A-AU	SMDJ85CA-AU	PGV	DGV	85	94.4	104	1	1	1	21.9	137
SMDJ90A-AU	SMDJ90CA-AU	PGX	DGX	90	100	111	1	1	1	20.5	146
SMDJ100A-AU	SMDJ100CA-AU	PGZ	DGZ	100	111	123	1	1	1	18.5	162
SMDJ110A-AU	SMDJ110CA-AU	PHE	DHE	110	122	135	1	1	1	16.9	177
SMDJ120A-AU	SMDJ120CA-AU	PHG	DHG	120	133	147	1	1	1	15.5	193
SMDJ130A-AU	SMDJ130CA-AU	PHK	DHK	130	144	159	1	1	1	14.4	209
SMDJ150A-AU	SMDJ150CA-AU	PHM	DHM	150	167	185	1	1	1	12.3	243
SMDJ160A-AU	SMDJ160CA-AU	PHP	DHP	160	178	197	1	1	1	11.6	259
SMDJ170A-AU	SMDJ170CA-AU	PHR	DHR	170	189	209	1	1	1	10.9	275
SMDJ180A-AU	SMDJ180CA-AU	PHT	DHT	180	201	222	1	1	1	10.3	292
SMDJ188A-AU	SMDJ188CA-AU	PHV	DHV	188	209	231	1	1	1	9.9	304
SMDJ200A-AU	SMDJ200CA-AU	PHX	DHX	200	224	247	1	1	1	9.2	324
SMDJ220A-AU	SMDJ220CA-AU	PHZ	DHZ	220	246	272	1	1	1	8.4	356
SMDJ250A-AU	SMDJ250CA-AU	PIE	DIG	250	279	309	1	1	1	7.4	405

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

Figure 1 - Peak Pulse Power Rating Curve

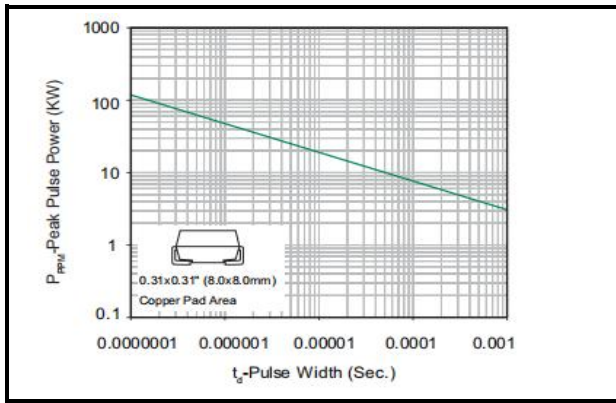


Figure 2 - Pulse Derating Curve

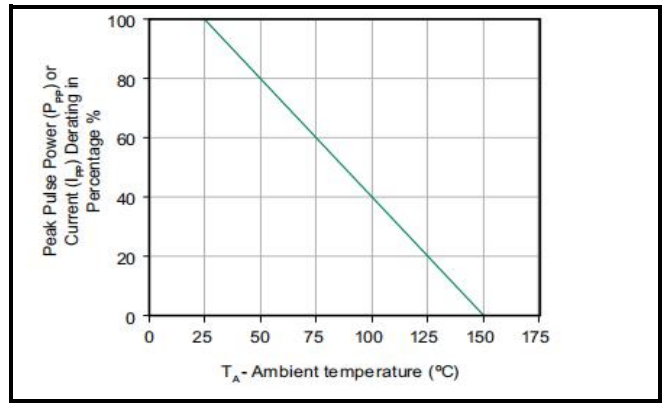


Figure 3 - Pulse Waveform

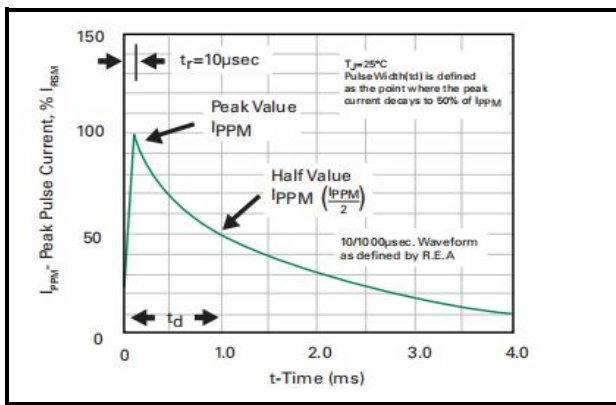


Figure 4 - Typical Junction Capacitance

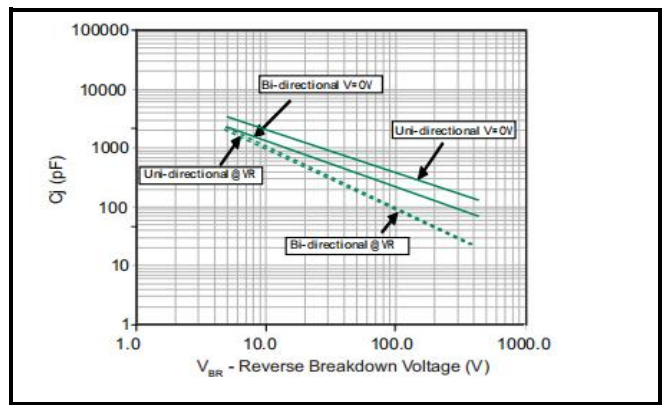


Figure 5 - Steady State Power Dissipation Derating Curve

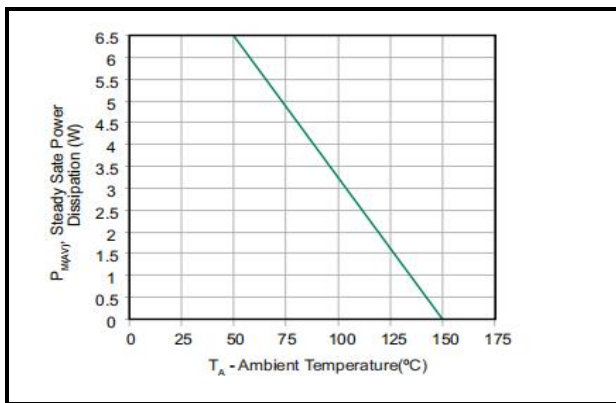
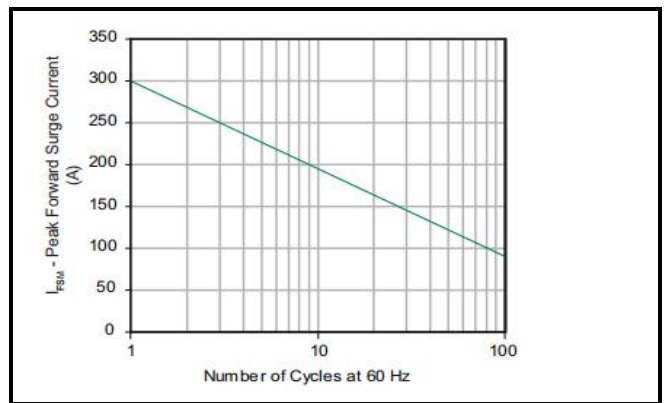


Figure 6 - Maximum Non-Repetitive Forward Surge Current Uni-Directional Only



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