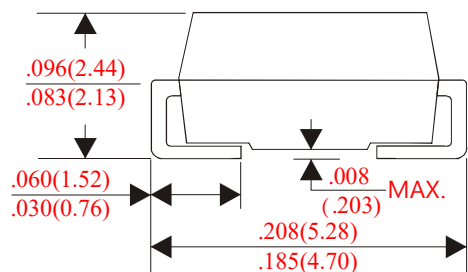
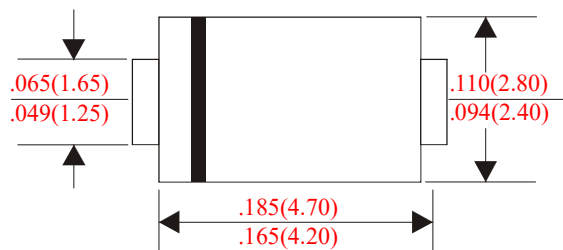


OUTLINE

SMA



Dimensions in inches and (millimeters)

FEATURES

- For surface mount applicatio.
- Built-in strain relief.
- Excellent clamping capability.
- Low profile package.
- Fast response time.
- Typical I_R less than 1mA above 10V.
- High temperature soldering guaranteed.
260°C / 10 seconds at terminals

MECHANICAL DATA

- Case: SMA
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Band denotes cathode
- Mounting position: Any
- Weight: 0.00086 ounce, 27 milligram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbols	Value	Units
Peak Power Dissipation at $T_A=25^\circ\text{C}$, $T_P=1\text{ms}$ (NOTE 1)	P_{PK}	400	Watts
Peak Forward Surge Current at 8.3ms Single Half Sine-Wave superimposed on rated load (JEDEC method) (NOTE 3)	I_{FSM}	40	Amp
Maximum Instantaneous Forward Voltage at 35.0A for Unidirectional only	V_F	3.5	Volts
Operating Junction Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

NOTE :

- 1.Non-repetitive current pulse per Fig. 3 and derated above $T_A=25^\circ\text{C}$ per Fig. 2.
- 2.Mounted on Copper Pad area of 5.0mm (.013mm Thick) to each terminal.
- 3.8.3ms single half sine-wave, duty cycle = 4 pulses per minute maximum.

DEVICES FOR BIPOLAR APPLICATIONS

1. For Bidirectional use C or CA Suffix for types SMAJ5.0 thru SMAJ170.
2. Electrical characteristics apply in both directions.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-PEAK PULSE POWER DERATING CURVE

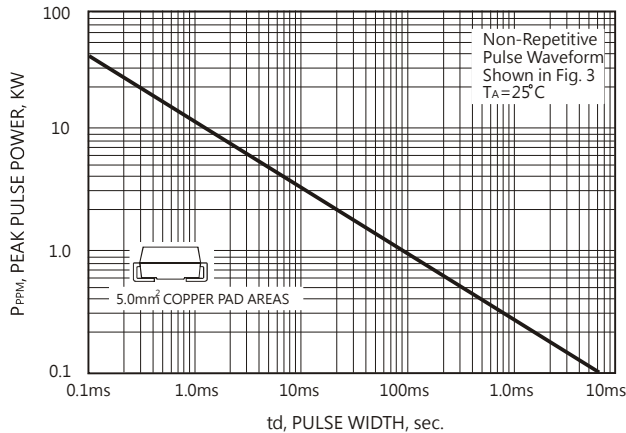


FIG.2-PULSE DERATING CURVE

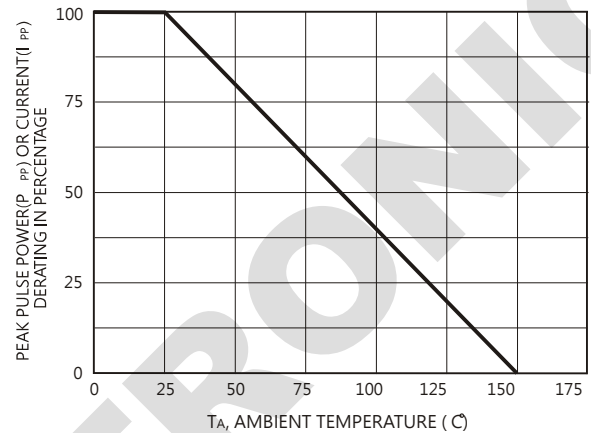


FIG.3-PULSE WAVE FORM

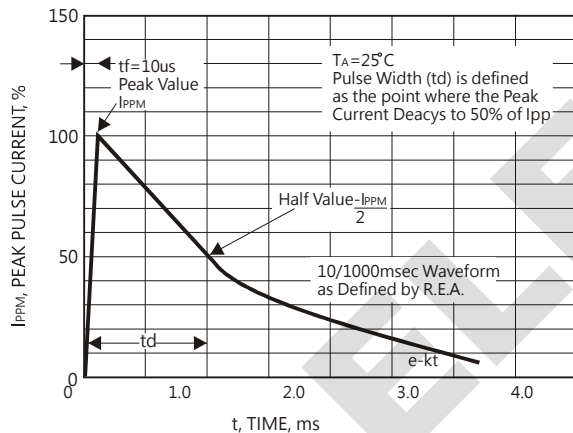


FIG.4-TYPICAL JUNCTION CAPACITANCE

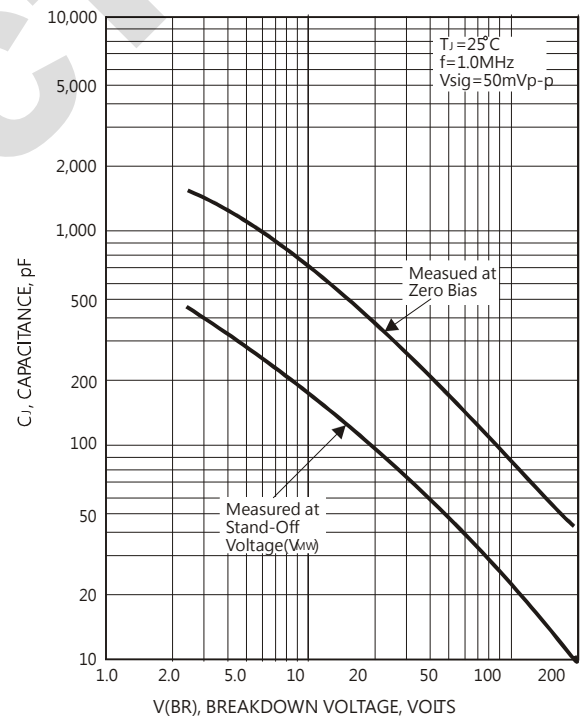
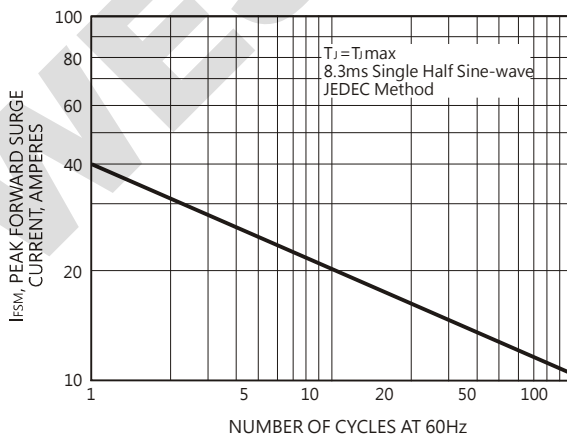


FIG.5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



Part number (uni)	Part number (bi)	VRWM (V)	VBR@IT (V)		IT (mA)	IR@ VRWM (μA)	VC @IPP(V)	IPP (A)	Marking Code	
			Min	Max					uni	bi
SMAJ5.0A	SMAJ5.0CA	5.0	6.40	7.00	10	800	9.2	43.5	AJ5.0A	AJ5.0CA
SMAJ6.0A	SMAJ6.0CA	6.0	6.67	7.37	10	800	10.3	38.8	AJ6.0A	AJ6.0CA
SMAJ6.5A	SMAJ6.5CA	6.5	7.22	7.98	10	500	11.2	35.7	AJ6.5A	AJ6.5CA
SMAJ7.0A	SMAJ7.0CA	7.0	7.78	8.60	10	200	12.0	33.3	AJ7.0A	AJ7.0CA
SMAJ7.5A	SMAJ7.5CA	7.5	8.33	9.21	1	100	12.9	31.0	AJ7.5A	AJ7.5CA
SMAJ8.0A	SMAJ8.0CA	8.0	8.89	9.83	1	50	13.6	29.4	AJ8.0A	AJ8.0CA
SMAJ8.5A	SMAJ8.5CA	8.5	9.44	10.40	1	20	14.4	27.8	AJ8.5A	AJ8.5CA
SMAJ9.0A	SMAJ9.0CA	9.0	10.00	11.10	1	10	15.4	26.0	AJ9.0A	AJ9.0CA
SMAJ10A	SMAJ10CA	10.0	11.10	12.30	1	5	17.0	23.5	AJ10A	AJ10CA
SMAJ11A	SMAJ11CA	11.0	12.20	13.50	1	5	18.2	22.0	AJ11A	AJ11CA
SMAJ12A	SMAJ12CA	12.0	13.30	14.70	1	1	19.9	20.1	AJ12A	AJ12CA
SMAJ13A	SMAJ13CA	13.0	14.40	15.90	1	1	21.5	18.6	AJ13A	AJ13CA
SMAJ14A	SMAJ14CA	14.0	15.60	17.20	1	1	23.2	17.2	AJ14A	AJ14CA
SMAJ15A	SMAJ15CA	15.0	16.70	18.50	1	1	24.4	16.4	AJ15A	AJ15CA
SMAJ16A	SMAJ16CA	16.0	17.80	19.70	1	1	26.0	15.4	AJ16A	AJ16CA
SMAJ17A	SMAJ17CA	17.0	18.90	20.90	1	1	27.6	14.5	AJ17A	AJ17CA
SMAJ18A	SMAJ18CA	18.0	20.00	22.10	1	1	29.2	13.7	AJ18A	AJ18CA
SMAJ20A	SMAJ20CA	20.0	22.20	24.50	1	1	32.4	12.3	AJ20A	AJ20CA
SMAJ22A	SMAJ22CA	22.0	24.40	26.90	1	1	35.5	11.3	AJ22A	AJ22CA
SMAJ24A	SMAJ24CA	24.0	26.70	29.50	1	1	38.9	10.3	AJ24A	AJ24CA
SMAJ26A	SMAJ26CA	26.0	28.90	31.90	1	1	42.1	9.5	AJ26A	AJ26CA
SMAJ28A	SMAJ28CA	28.0	31.10	34.40	1	1	45.4	8.8	AJ28A	AJ28CA
SMAJ30A	SMAJ30CA	30.0	33.30	36.80	1	1	48.4	8.3	AJ30A	AJ30CA
SMAJ33A	SMAJ33CA	33.0	36.70	40.60	1	1	53.3	7.5	AJ33A	AJ33CA
SMAJ36A	SMAJ36CA	36.0	40.00	44.20	1	1	58.1	6.9	AJ36A	AJ36CA
SMAJ40A	SMAJ40CA	40.0	44.40	49.10	1	1	64.5	6.2	AJ40A	AJ40CA
SMAJ43A	SMAJ43CA	43.0	47.80	52.80	1	1	69.4	5.8	AJ43A	AJ43CA
SMAJ45A	SMAJ45CA	45.0	50.00	55.30	1	1	72.7	5.5	AJ45A	AJ45CA
SMAJ48A	SMAJ48CA	48.0	53.30	58.90	1	1	77.4	5.2	AJ48A	AJ48CA
SMAJ51A	SMAJ51CA	51.0	56.70	62.70	1	1	82.4	4.9	AJ51A	AJ51CA
SMAJ54A	SMAJ54CA	54.0	60.00	66.30	1	1	87.1	4.6	AJ54A	AJ54CA
SMAJ58A	SMAJ58CA	58.0	64.40	71.20	1	1	93.6	4.3	AJ58A	AJ58CA
SMAJ60A	SMAJ60CA	60.0	66.70	73.70	1	1	96.8	4.1	AJ60A	AJ60CA
SMAJ64A	SMAJ64CA	64.0	71.10	78.60	1	1	103.0	3.9	AJ64A	AJ64CA
SMAJ70A	SMAJ70CA	70.0	77.80	86.00	1	1	113.0	3.5	AJ70A	AJ70CA
SMAJ75A	SMAJ75CA	75.0	83.20	92.10	1	1	121.0	3.3	AJ75A	AJ75CA
SMAJ78A	SMAJ78CA	78.0	86.70	95.80	1	1	126.0	3.2	AJ78A	AJ78CA
SMAJ85A	SMAJ85CA	85.0	94.40	104.00	1	1	137.0	2.9	AJ85A	AJ85CA
SMAJ90A	SMAJ90CA	90.0	100.00	111.00	1	1	146.0	2.7	AJ90A	AJ90CA
SMAJ100A	SMAJ100CA	100.0	111.00	123.00	1	1	162.0	2.5	AJ100A	AJ100CA
SMAJ110A	SMAJ110CA	110.0	122.00	135.00	1	1	177.0	2.3	AJ110A	AJ110CA
SMAJ120A	SMAJ120CA	120.0	133.00	147.00	1	1	193.0	2.1	AJ120A	AJ120CA
SMAJ130A	SMAJ130CA	130.0	144.00	159.00	1	1	209.0	1.9	AJ130A	AJ130CA
SMAJ150A	SMAJ150CA	150.0	167.00	185.00	1	1	243.0	1.6	AJ150A	AJ150CA
SMAJ160A	SMAJ160CA	160.0	178.00	197.00	1	1	259.0	1.5	AJ160A	AJ160CA
SMAJ170A	SMAJ170CA	170.0	189.00	209.00	1	1	275.0	1.5	AJ170A	AJ170CA
SMAJ180A	SMAJ180CA	180.0	201.00	222.00	1	1	292.0	1.4	AJ180A	AJ180CA
SMAJ190A	SMAJ190CA	190.0	211.00	233.00	1	1	308.0	1.3	AJ190A	AJ190CA
SMAJ200A	SMAJ200CA	200.0	224.00	247.00	1	1	324.0	1.2	AJ200A	AJ200CA
SMAJ210A	SMAJ210CA	210.0	237.00	263.00	1	1	340.0	1.2	AJ210A	AJ210CA
SMAJ220A	SMAJ220CA	220.0	246.00	272.00	1	1	356.0	1.1	AJ220A	AJ220CA
SMAJ250A	SMAJ250CA	250.0	279.00	309.00	1	1	405.0	1.0	AJ250A	AJ250CA
SMAJ300A	SMAJ300CA	300.0	335.00	371.00	1	1	486.0	0.8	AJ300A	AJ300CA
SMAJ350A	SMAJ350CA	350.0	391.00	435.00	1	1	567.0	0.7	AJ350A	AJ350CA
SMAJ400A	SMAJ400CA	400.0	447.00	494.00	1	1	648.0	0.6	AJ400A	AJ400CA
SMAJ440A	SMAJ440CA	440.0	492.00	543.00	1	1	713.0	0.6	AJ440A	AJ440CA