

Features

- For Surface Mounted Applications in Order to Optimize Board Space
- Glass Passivated Junction
- Excellent Clamping Capability
- High Temp Soldering: 260°C / 40 Seconds At Terminals
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Mechanical Data

- Polarity: Indicated by Cathode Band Except Bi-directional Types

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C

Peak Pulse Power Surge Current with a 10/1000µs Waveform	I _{PPM}	See the Table	Note 3
Peak Pulse Power Dissipation	P _{PPM}	600W (Min.)	Note 3,4

Note:

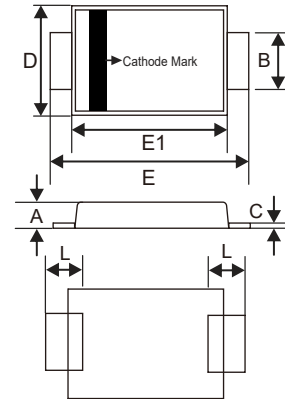
1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
3. Non-repetitive current pulse, per Fig.2 and derated above T_A=25 °C per Fig.1
4. Peak pulse power waveform is 10/1000 µs

Pin Configuration:



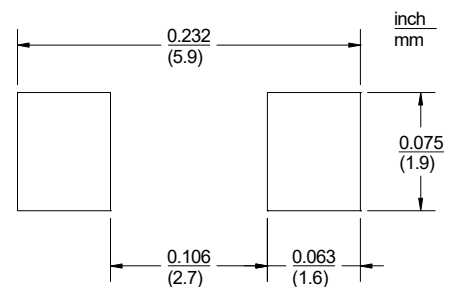
**600Watts TVS
5.0 to 130 Volts**

DO-221AC(SMA-FL)



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.035	0.049	0.90	1.25	
B	0.049	0.065	1.25	1.65	
C	0.004	0.016	0.10	0.40	
D	0.089	0.116	2.25	2.95	
E	0.173	0.220	4.40	5.60	
E1	0.126	0.181	3.20	4.60	
L	0.020	0.059	0.50	1.50	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

MCC PART NUMBER		REVERSE STAND-OFF VOLTAGE V_{WM}	BREAKDOWN VOLTAGE $V_{(BR)} @ I_T$ (VOLTS)			MAXIMUM CLAMPING VOLTAGE @ I_{PP} (VOLTS)	PEAK PULSE CURRENT I_{PP} (AMPS)	MAXIMUM REVERSE LEAKAGE @ V_{WM} I_D (μ A)	MARKING CODE	
			MIN	MAX	I_T (mA)				UNI	BI
UNI-POLAR	BI-POLAR	(VOLTS)								
SMA6J5.0AFL		5.0	6.40	7.00	10	9.2	65.2	800	5.0A	
SMA6J6.0AFL		6.0	6.67	7.37	10	10.3	58.2	800	6.0A	
SMA6J6.5AFL		6.5	7.22	7.98	10	11.2	53.6	500	6.5A	
SMA6J7.0AFL		7.0	7.78	8.60	10	12.0	50.0	200	7.0A	
SMA6J7.5AFL		7.5	8.33	9.21	1	12.9	46.5	100	7.5A	
SMA6J8.0AFL		8.0	8.89	9.83	1	13.6	44.1	50	8.0A	
SMA6J8.5AFL		8.5	9.44	10.4	1	14.4	41.7	10	8.5A	
SMA6J9.0AFL		9.0	10.0	11.1	1	15.4	39.0	5	9.0A	
SMA6J10AFL		10	11.1	12.3	1	17.0	35.3	5	10A	
SMA6J11AFL	SMA6J11CAFL	11	12.2	13.5	1	18.2	33.0	1	11A	11CA
SMA6J12AFL	SMA6J12CAFL	12	13.3	14.7	1	19.9	30.1	1	12A	12CA
SMA6J13AFL	SMA6J13CAFL	13	14.4	15.9	1	21.5	27.9	1	13A	13CA
SMA6J14AFL	SMA6J14CAFL	14	15.6	17.2	1	23.2	25.9	1	14A	14CA
SMA6J15AFL	SMA6J15CAFL	15	16.7	18.5	1	24.4	24.6	1	15A	15CA
SMA6J16AFL	SMA6J16CAFL	16	17.8	19.7	1	26.0	23.1	1	16A	16CA
SMA6J17AFL	SMA6J17CAFL	17	18.9	20.9	1	27.6	21.7	1	17A	17CA
SMA6J18AFL	SMA6J18CAFL	18	20.0	22.1	1	29.2	20.6	1	18A	18CA
SMA6J20AFL	SMA6J20CAFL	20	22.2	24.5	1	32.4	18.5	1	20A	20CA
SMA6J22AFL	SMA6J22CAFL	22	24.4	26.9	1	35.5	16.9	1	22A	22CA
SMA6J24AFL	SMA6J24CAFL	24	26.7	29.5	1	38.9	15.4	1	24A	24CA
SMA6J26AFL	SMA6J26CAFL	26	28.9	31.9	1	42.1	14.3	1	26A	26CA
SMA6J28AFL	SMA6J28CAFL	28	31.1	34.4	1	45.4	13.2	1	28A	28CA
SMA6J30AFL	SMA6J30CAFL	30	33.3	36.8	1	48.4	12.4	1	30A	30CA
SMA6J33AFL	SMA6J33CAFL	33	36.7	40.6	1	53.3	11.3	1	33A	33CA
SMA6J36AFL	SMA6J36CAFL	36	40.0	44.2	1	58.1	10.3	1	36A	36CA
SMA6J40AFL	SMA6J40CAFL	40	44.4	49.1	1	64.5	9.3	1	40A	40CA
SMA6J43AFL	SMA6J43CAFL	43	47.8	52.8	1	69.4	8.7	1	43A	43CA
SMA6J45AFL	SMA6J45CAFL	45	50.0	55.3	1	72.7	8.3	1	45A	45CA
SMA6J48AFL	SMA6J48CAFL	48	53.3	58.9	1	77.4	7.8	1	48A	48CA
SMA6J51AFL	SMA6J51CAFL	51	56.7	62.7	1	82.4	7.3	1	51A	51CA
SMA6J54AFL	SMA6J54CAFL	54	60.0	66.3	1	87.1	6.9	1	54A	54CA
SMA6J58AFL	SMA6J58CAFL	58	64.4	71.2	1	93.6	6.4	1	58A	58CA
SMA6J60AFL	SMA6J60CAFL	60	66.7	73.7	1	96.8	6.2	1	60A	60CA
SMA6J64AFL	SMA6J64CAFL	64	71.1	78.6	1	103	5.8	1	64A	64CA
SMA6J70AFL	SMA6J70CAFL	70	77.8	86.0	1	113	5.3	1	70A	70CA
SMA6J75AFL	SMA6J75CAFL	75	83.3	92.1	1	121	5.0	1	75A	75CA
SMA6J78AFL	SMA6J78CAFL	78	86.7	95.8	1	126	4.8	1	78A	78CA
SMA6J80AFL	SMA6J80CAFL	78	88.8	97.6	1	129	4.6	1	80A	80CA
SMA6J85AFL	SMA6J85CAFL	85	94.4	104	1	137	4.4	1	85A	85CA
SMA6J90AFL		90	100	111	1	146	4.1	1	90A	
SMA6J100AFL		100	111	123	1	162	3.7	1	100A	
SMA6J110AFL		110	122	135	1	177	3.4	1	110A	
SMA6J120AFL		120	133	147	1	193	3.1	1	120A	
SMA6J130AFL		130	144	159	1	209	2.9	1	130A	

Curve Characteristics

Fig. 1 - Pulse Derating Curve

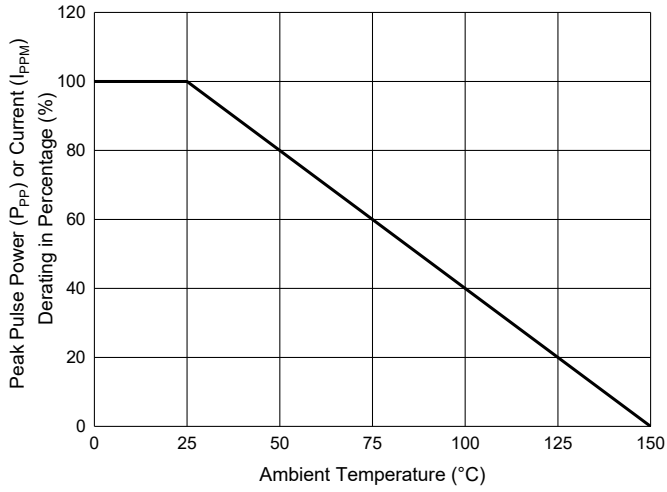


Fig. 2 - Pulse Waveform

