

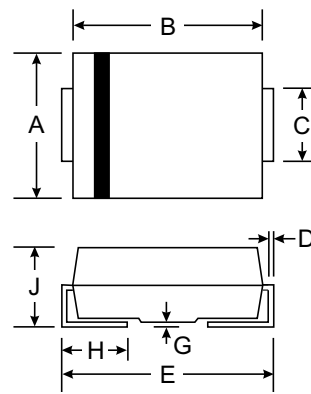
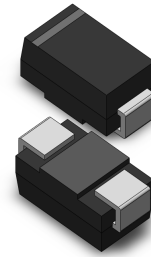
**VOLTAGE RANGE: 3.0 - 170V**  
**POWER: 300Watts**

### Features

- For surface mounted applications
- Low-profile package
- Optimized for LAN protection applications
- Ideal for ESD protection of data lines in accordance with IEC 1000-4-2 (IEC801-2)
- Ideal for EFT protection of data lines in accordance with IEC 1000-4-4 (IEC801-4)
- Low incremental surge resistance

### Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.

Rating	Symbol	Value	Units
Peak Pulse Power Dissipation at TA=25°C by 10x1000µs test waveform (Fig.1)(Note 1),(Note 2)	P <sub>PPM</sub>	300	Watts
Power Dissipation on ini finite heat sink at TA=50°C	P <sub>D</sub>	2	Watts
Peak Forward Surge Current, 8.3ms Single Half Sine	I <sub>FSM</sub>	20	Amps
Maximum Instantaneous Forward Voltage at 25A for Unidirectional only (Note 4)	V <sub>F</sub>	3.5/6.5	V
Operating junction and Storage Temperature Range.	T <sub>J</sub> , T <sub>STG</sub>	-55°C to 150°C	°C
Typical Thermal Resistance Junction to Lead	R	30	°C/W
Typical Thermal Resistance Junction to Ambient	R <sub>uJA</sub>	120	°C/W

Notes:

1. Non-repetitive current pulse , per Fig. 3 and derated above TA = 25°C per Fig. 2.
2. Measured on 8.3ms single half sine wave or equivalent square wave, duty cycle=4 perminute maximum.
3. VF<3.5V for devices of VBR \_ < 200V and VF<5.0V for devices of VBR \_ > 201V.



Type Number	Reverse Stand-Off Voltage	Breakdown Voltage@I <sub>T</sub>		Test Current	Maximum Clamping Voltage @I <sub>PP</sub>	Peak Pulse Current	Reverse Leakage @V <sub>RWM</sub>
(UNI)	V <sub>RWM</sub> (V)	V <sub>BR</sub> MIN.(V)	V <sub>BR</sub> MAX.(V)	I <sub>T</sub> (mA)	V <sub>C</sub> (V)	I <sub>PP</sub> (A)	I <sub>R</sub> (μA)
SMFJ3.0A	3.0	4.10	4.50	10	8.0	25.0	400
SMFJ5.0A	5.0	6.40	7.25	10	9.2	21.7	400
SMFJ6.0A	6.0	6.67	7.67	10	10.3	19.4	400
SMFJ6.5A	6.5	7.22	8.30	10	11.2	17.9	400
SMFJ7.0A	7.0	7.78	8.95	10	12.0	16.7	250
SMFJ7.5A	7.5	8.33	9.58	1	12.9	15.5	100
SMFJ8.0A	8.0	8.89	10.23	1	13.6	14.7	50
SMFJ8.5A	8.5	9.44	10.82	1	14.4	13.9	10
SMFJ9.0A	9.0	10.00	11.50	1	15.4	13.5	5.0
SMFJ10A	10.0	11.10	12.80	1	17.0	11.8	2.5
SMFJ11A	11.0	12.20	14.00	1	18.2	11.0	2.5
SMFJ12A	12.0	13.30	15.30	1	19.9	10.1	2.5
SMFJ13A	13.0	14.40	16.50	1	21.5	9.30	2.5
SMFJ14A	14.0	15.60	17.90	1	23.2	8.60	2.5
SMFJ15A	15.0	16.70	19.20	1	24.4	8.20	2.5
SMFJ16A	16.0	17.80	20.50	1	26.0	7.70	2.5
SMFJ17A	17.0	18.90	21.70	1	27.6	7.20	2.5
SMFJ18A	18.0	20.00	23.30	1	29.2	5.80	2.5
SMFJ20A	20.0	22.20	25.50	1	32.4	6.20	2.5
SMFJ22A	22.0	24.40	28.00	1	35.5	5.60	2.5
SMFJ24A	24.0	26.70	30.70	1	38.9	5.10	2.5
SMFJ26A	26.0	28.90	33.20	1	42.1	4.80	2.5
SMFJ28A	28.0	31.10	35.80	1	45.4	4.40	2.5
SMFJ30A	30.0	33.30	38.30	1	48.4	4.10	2.5
SMFJ33A	33.0	36.70	42.20	1	53.3	3.80	2.5
SMFJ36A	36.0	40.00	46.00	1	58.1	3.40	2.5
SMFJ40A	40.0	44.40	51.10	1	64.5	3.10	2.5
SMFJ43A	43.0	47.80	54.90	1	69.4	2.90	2.5
SMFJ45A	45.0	50.00	57.50	1	72.7	2.80	2.5
SMFJ48A	48.0	53.30	61.30	1	77.4	2.60	2.5
SMFJ51A	51.0	56.70	65.20	1	82.4	2.40	2.5
SMFJ54A	54.0	60.00	69.00	1	87.1	2.30	2.5
SMFJ58A	58.0	64.40	74.10	1	93.6	2.10	2.5
SMFJ60A	60.0	66.70	76.70	1	96.8	1.80	2.5
SMFJ64A	64.0	71.10	81.80	1	103.0	1.70	2.5
SMFJ70A	70.0	77.80	89.50	1	113.0	1.50	2.5
SMFJ75A	75.0	83.30	95.80	1	121.0	1.40	2.5
SMFJ78A	78.0	86.70	99.70	1	126.0	1.40	2.5
SMFJ85A	85.0	94.40	108.20	1	137.0	1.30	2.5
SMFJ90A	90.0	100.00	115.50	1	146.0	1.20	2.5
SMFJ100A	100.0	111.00	128.00		162.0	1.10	2.5
SMFJ110A	110.0	122.00	140.50	1	177.0	1.00	2.5
SMFJ120A	120.0	133.00	153.00	1	193.0	0.90	2.5
SMFJ130A	130.0	144.00	165.50	1	209.0	0.80	2.5
SMFJ150A	150.0	167.00	192.60	1	243.0	0.70	2.5
SMFJ160A	160.0	178.00	205.00	1	259.0	0.70	2.5
SMFJ170A	170.0	189.00	217.50	1	275.0	0.60	2.5



Figure 1 - Peak Pulse Power Rating Curve

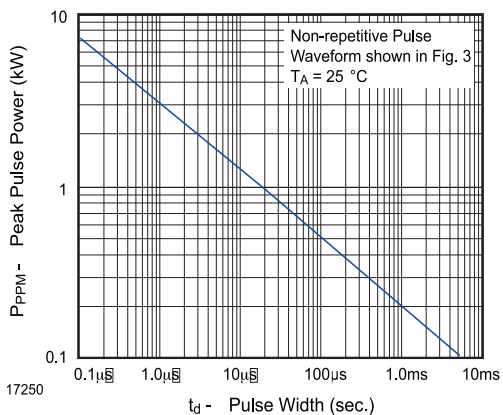


Figure 2 - Pulse Derating Curve

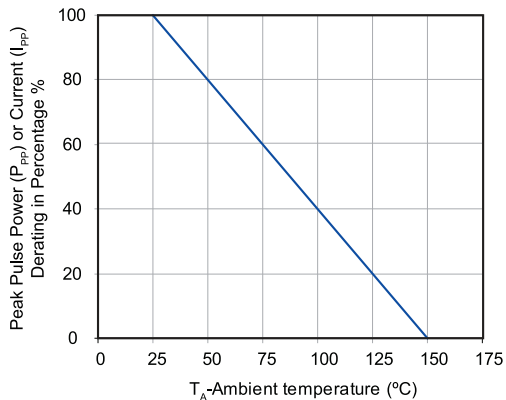


Figure 3 - Pulse Waveform

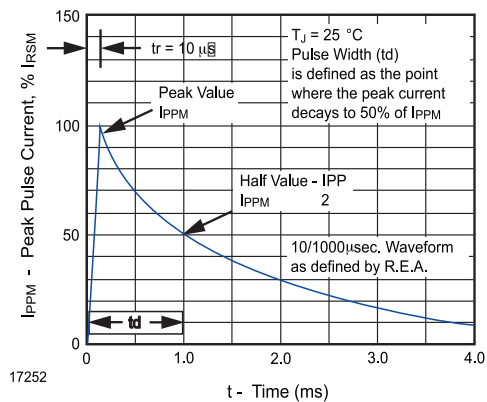


Figure 4 - Typical Junction Capacitance

