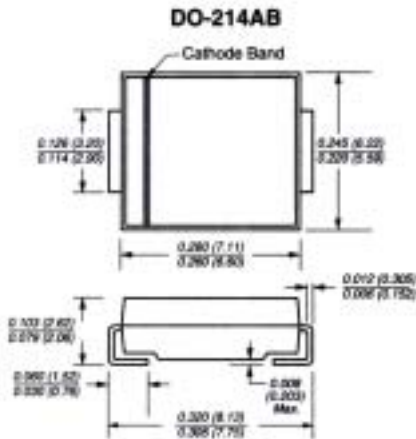


**5.0SMDJ SERIES**  
**SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR**  
**VOLTAGE - 20 TO 170 Volts**  
**5000Watts Peak Pulse Power**

5.0SMDJ PART NUMBER		DEVICE MARKING CODE		REVERSE STAND- OFF VOLTAGE V <sub>RWM</sub> (V)	BREAKDO WN VOLTAGE V <sub>BR</sub> (V) MIN.@I <sub>T</sub>	BREAKDO WN VOLTAGE V <sub>BR</sub> (V) MAX.@I <sub>T</sub>	TEST CURRENT I <sub>T</sub> (mA)	MAXIMUM CLAMPING VOLTAGE @I <sub>pp</sub> V <sub>c</sub> (V)	PEAK PULSE CURRENT I <sub>pp</sub> (A)	REVERSE LEAKAGE @ V <sub>RWM</sub> I <sub>R</sub> (μA)
		Uni-polar	Bi-polar							
5.0SMDJ 20A		5PEW	5BEW	20.0	22.20	24.50	1	32.4	155.00	5
5.0SMDJ 22A	3.0SMCJ 22CA	5PEX	5BEX	22.0	24.40	26.90	1	35.5	141.00	5
5.0SMDJ 24A	3.0SMCJ 24CA	5PEZ	5BEZ	24.0	26.70	29.50	1	38.9	129.00	5
5.0SMDJ 26A	3.0SMCJ 26CA	5PFE	5BFE	26.0	28.90	31.90	1	42.1	119.00	5
5.0SMDJ 28A	3.0SMCJ 28CA	5PFG	5BFG	28.0	31.10	34.40	1	45.4	110.00	5
5.0SMDJ 30A	3.0SMCJ 30CA	5PFK	5BFK	30.0	33.30	36.80	1	48.4	103.00	5
5.0SMDJ 33A	3.0SMCJ 33CA	5PFM	5BFM	33.0	36.70	40.60	1	53.3	93.90	5
5.0SMDJ 36A	3.0SMCJ 36CA	5PFP	5BFP	36.0	40.00	44.20	1	58.1	86.10	5
5.0SMDJ 40A	3.0SMCJ 40CA	5PFR	5BFR	40.0	44.40	49.10	1	64.5	77.60	5
5.0SMDJ 43A	3.0SMCJ 43CA	5PFT	5BFT	43.0	47.80	52.80	1	69.4	72.10	5
5.0SMDJ 45A	3.0SMCJ 45CA	5PFV	5BFV	45.0	50.00	55.30	1	72.7	68.80	5
5.0SMDJ 48A	3.0SMCJ 48CA	5PFX	5BFX	48.0	53.30	58.90	1	77.4	64.70	5
5.0SMDJ 51A	3.0SMCJ 51CA	5PFZ	5BFZ	51.0	56.70	62.70	1	82.4	60.70	5
5.0SMDJ 54A	3.0SMCJ 54CA	5RGE	5BGE	54.0	60.00	66.30	1	87.1	57.50	5
5.0SMDJ 58A	3.0SMCJ 58CA	5PGG	5BGG	58.0	64.40	71.20	1	93.6	53.50	5
5.0SMDJ 60A	3.0SMCJ 60CA	5PGK	5BGK	60.0	66.70	73.70	1	96.8	51.70	5
5.0SMDJ 64A	3.0SMCJ 64CA	5PGM	5BGM	64.0	71.10	78.60	1	103.0	48.60	5
5.0SMDJ 70A	3.0SMCJ 70CA	5PGP	5BGP	70.0	77.80	86.00	1	113.0	44.30	5
5.0SMDJ 75A	3.0SMCJ 75CA	5PGR	5BGR	75.0	83.30	92.10	1	121.0	41.40	5
5.0SMDJ 78A	3.0SMCJ 78CA	5PGT	5BGT	78.0	86.70	95.80	1	126.0	39.70	5
5.0SMDJ 85A	3.0SMCJ 85CA	5PGV	5BGV	85.0	94.40	104.00	1	137.0	36.50	5
5.0SMDJ 90A	3.0SMCJ 90CA	5PGX	5BGX	90.0	100.00	111.00	1	146.0	34.30	5
5.0SMDJ 100A	3.0SMCJ 100CA	5PGZ	/	100.0	111.00	123.00	1	162.0	30.90	5
5.0SMDJ 110A	3.0SMCJ 110CA	5PHE		110.0	122.00	135.00	1	177.0	28.30	5
5.0SMDJ 120A	3.0SMCJ 120CA	5PHG		120.0	133.00	147.00	1	193.0	26.00	5
5.0SMDJ 130A	3.0SMCJ 130CA	5PHK		130.0	144.00	159.00	1	209.0	24.00	5
5.0SMDJ 150A	3.0SMCJ 150CA	5PHM		150.0	167.00	185.00	1	243.0	20.60	5
5.0SMDJ 160A	3.0SMCJ 160CA	5PHP		160.0	178.00	197.00	1	259.0	19.30	5
5.0SMDJ 170A	3.0SMCJ 170CA	5PHR		170.0	189.00	209.00	1	275.0	18.20	5

## 5.0SMDJ SERIES

### SURFACE MOUNT TRANSIENT VOLTAGE SUPPRESSOR VOLTAGE-20 TO 170 Volts 5000 Watt Peak Pulse Power



#### FEATURES

- For surface mounted applications in order to optimize board space
- Low profile package
- Built-in strain relief
- Glass passivated junction
- Low inductance
- Excellent clamping capability
- Repetition Rate (duty cycle):0.01%
- Fast response time: typically less than 1.0ps from 0 Volts to BV for unidirectional types
- Typical IR less than 1uA
- High temperature soldering: 250°C/10 seconds at terminals
- Plastic package has Underwriters Laboratory Flammability 94V-0

Dimensions in inches and (millimeters) **MECHANICAL DATA**

**Case:** JEDEC DO214AB. Molded plastic over glass passivated junction  
**Terminal:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denoted positive end (cathode) except Bidirectional  
**Standard Packaging:** 16mm tape (EIA STD RS-481)  
**Weight:** 0.007 ounce, 0.21 gram

#### MAXIMUM RATINGS AND CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

RATING	SYMBOL	VALUE	UNITS
Peak Pulse Power Dissipation on 10/1000μs waveform (Note 1,2 ,FIG.1)	$P_{PPM}$	Minimum 5000	Watts
Peak Pulse Current of on 10/1000μs waveform (Note 1,FIG.3)	$I_{PPM}$	SEE TABLE	Amps
Peak Forward Surge Current,8.3ms Single Half Sine-Wave Superimposed on Rated Load,(JEDEC Method) (Note2, 3)	$I_{FSM}$	300	Amps
Operating junction and Storage Temperature Range	$T_J, T_{STG}$	-55 to +150	

#### Notes :

- 1.Non-repetitive current pulse , per Fig. 3 and derated above  $T_A = 25$  °C per Fig. 2 .
- 2.Mounted on 8.0mm<sup>2</sup> Copper Pads to each terminal
- 3.8.3ms single half sine-wave , or equivalent square wave, Duty cycle = 4 pulses per minutes maximum.

# 5.0SMDJ SERIES

## RATINGS AND CHARACTERISTIC CURVES

**Ratings and Characteristic Curves** ( $T_A=25$  unless otherwise noted)

