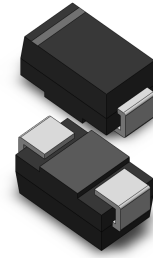


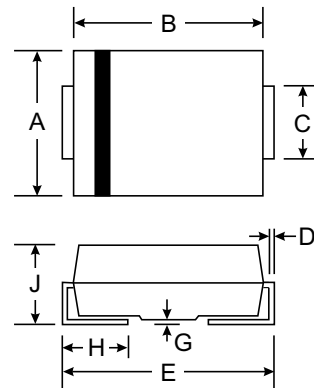
### Features

- Low voltage overshoot
- Low on-state voltage
- Does not degrade surge capability after multiple surge events within limit
- Fails short circuit when surged in excess of ratings
- Low Capacitance



### 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		

### Surge Ratings

Series	2/10 S <sup>1</sup>	8/20 S <sup>1</sup>	10/160 S <sup>1</sup>	10/560 S <sup>1</sup>	10/1000 S <sup>1</sup>	5/310 S <sup>1</sup>	I <sub>TSM</sub> 50/60 Hz	di/dt
	2/10 S <sup>2</sup>	1.2/50 S <sup>2</sup>	10/160 S <sup>2</sup>	10/560 S <sup>2</sup>	10/1000 S <sup>2</sup>	10/700 S <sup>2</sup>		
	A min	A min	A min	A min	A min	A min		
A	150	150	90	50	45	50	20	500

#### Notes:

1. Current waveform in  $\mu$ s
2. Voltage waveform in  $\mu$ s

- Peak pulse current rating (I<sub>PP</sub>) is repetitive and guaranteed for the life of the product.
- I<sub>PP</sub> ratings applicable over temperature range of -40 C to +85 C
- The device must initially be in thermal equilibrium with -40°C < T<sub>J</sub> < +150°C

### Thermal Considerations

Symbol	Parameter	Value	Unit
T <sub>J</sub>	Operating Junction Temperature Range	- 40 to + 150	°C
T <sub>s</sub>	Storage Temperature Range	- 40 to +150	°C
R <sub>θJA</sub>	Thermal Resistance: Junction to Ambient	90	°C/W

Part Number	Marking	$V_{DRM}$ @ $I_{DRM}=5$ A	$V_S$ @100V/ S	$V_T$ @ $I_T=2.2A$	$I_S$	$I_T$	$I_H$	$C_0$ @1MHz	
		V min	V max	V max	mA max	A max	mA min	pF min	pF max
P0080TA	P008A	6	25	4	800	2.2	50	25	50
P0300TA	P03A	25	40	4	800	2.2	50	15	70
P0640TA	P06A	58	77	4	800	2.2	150	40	50
P0720TA	P07A	65	88	4	800	2.2	150	35	50
P0900TA	P09A	75	98	4	800	2.2	150	25	45
P1100TA	P11A	90	130	4	800	2.2	150	30	45
P1300TA	P13A	120	160	4	800	2.2	150	25	45
P1500TA	P15A	140	180	4	800	2.2	150	25	40
P1800TA	P18A	170	220	4	800	2.2	150	25	40
P2000TA	P20A	180	220	4	800	2.2	150	20	40
P2300TA	P23A	190	260	4	800	2.2	150	25	35
P2600TA	P26A	220	300	4	800	2.2	150	20	35
P3100TA	P31A	275	350	4	800	2.2	150	20	30
P3500TA	P35A	320	400	4	800	2.2	150	20	30
P4000TA	P40A	360	460	4	800	2.2	150	20	30
P4500TA	P45A	400	540	4	800	2.2	150	20	30
P5000TA	P50A	440	600	4	800	2.2	150	20	30

Notes:

- Absolute maximum ratings measured at  $T_A=25$  C (unless otherwise noted).
- Devices are bi-directional.

Characteristic Curves

Figure1 - V-I Characteristics

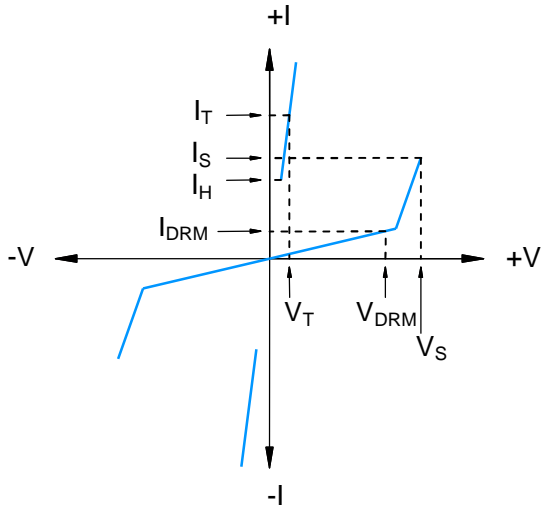


Figure 2-  $t_r$   $t_d$  PulseWaveform

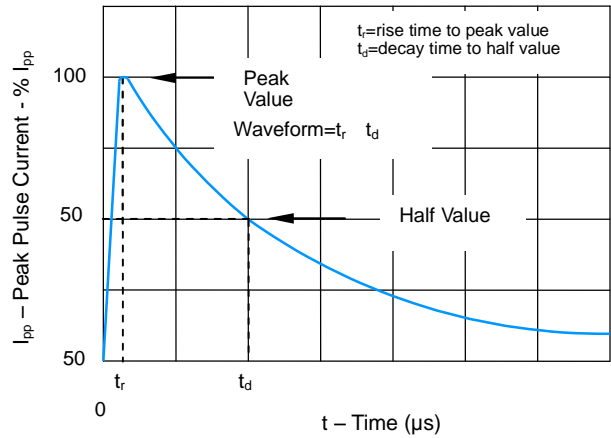


Figure3-Normalized  $V_S$  Change Versus Junction Temperature

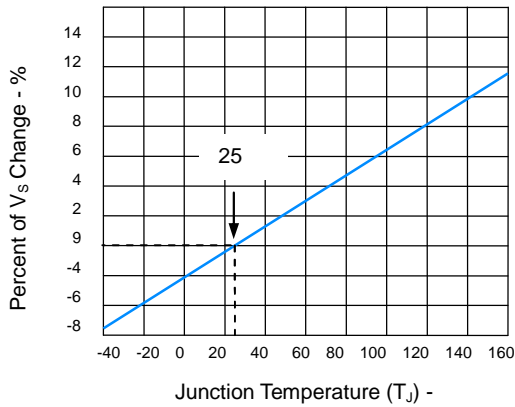


Figure4 -Normalized DC Holding Current Versus Case Temperature

