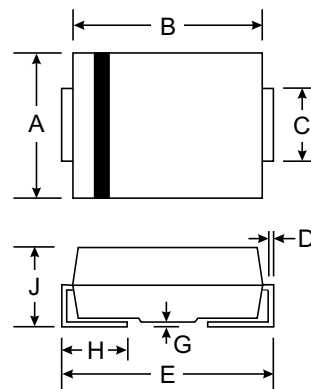


### Features

- 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  $\mu\text{s}$
  2. Voltage waveform in  $\mu\text{s}$
- Peak pulse current rating ( $I_{PP}$ ) is repetitive and guaranteed for the life of the product.
  - $I_{PP}$  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	$V_{DRM}$ @ $I_{DRM}=5A$	$V_S$ @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
P0080SA	6	25	4	800	2.2	50	25	150
P0300SA	25	40	4	800	2.2	50	15	140
P0640SA	58	77	4	800	2.2	150	40	60
P0720SA	65	88	4	800	2.2	150	35	60
P0900SA	75	98	4	800	2.2	150	25	55
P1100SA	90	130	4	800	2.2	150	30	50
P1300SA	120	160	4	800	2.2	150	25	45
P1500SA	140	180	4	800	2.2	150	25	40
P1800SA	170	220	4	800	2.2	150	25	35
P2000SA	180	220	4	800	2.2	150	20	35
P2300SA	190	260	4	800	2.2	150	25	35
P2600SA	220	300	4	800	2.2	150	20	35
P3100SA	275	350	4	800	2.2	150	20	35
P3500SA	320	400	4	800	2.2	150	20	35
P4000SA	360	460	4	800	2.2	150	20	35
P4500SA	400	540	4	800	2.2	150	20	35
P5000SA	440	600	4	800	2.2	150	20	35

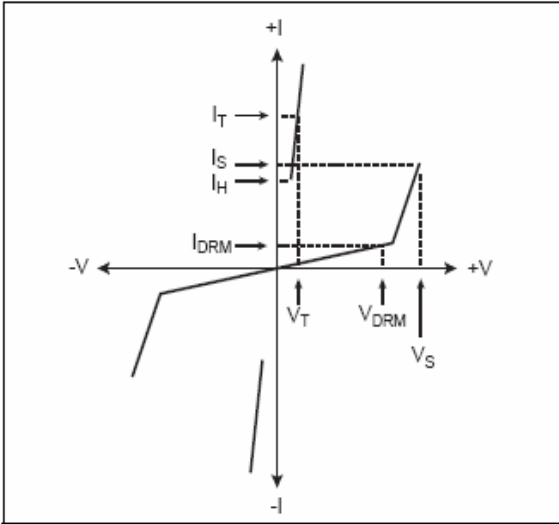


Figure1 V-I Characteristics

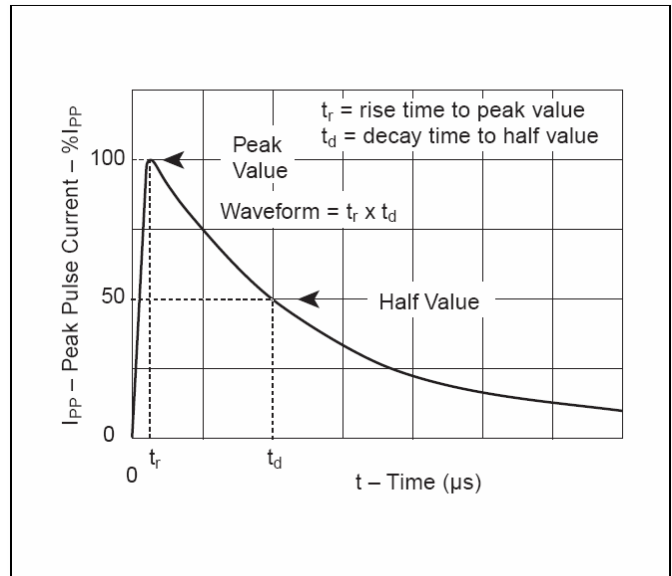


Figure2  $t_r \times t_d$  Pulse Wave-form

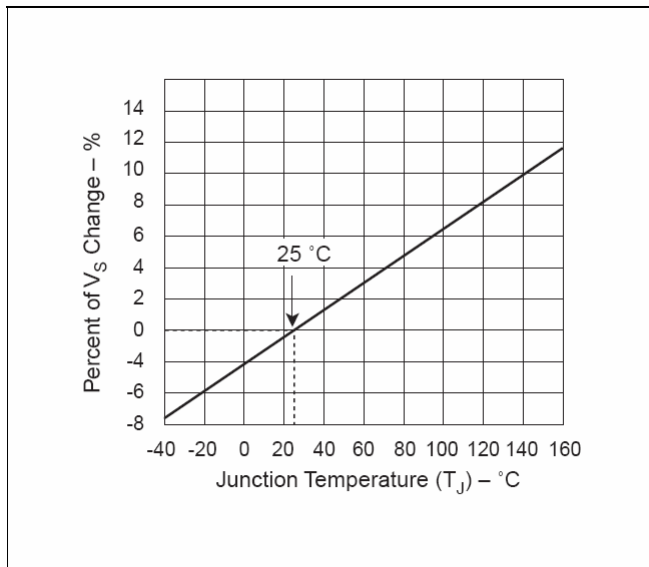


Figure3  
Normalized  $V_S$  Change versus Junction Temperature

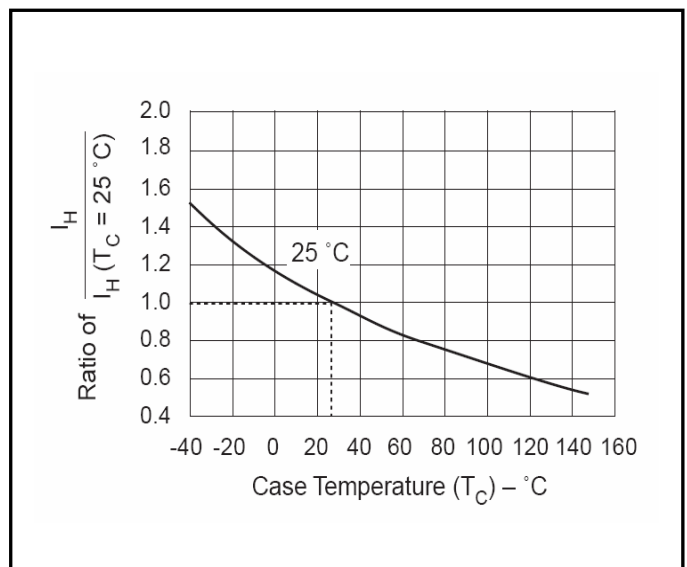


Figure4  
Normalized DC Holding Current