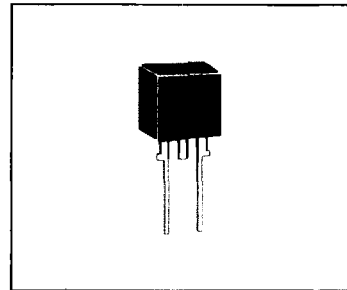


## CATV Series

The P1400AD SIDACTor is a 1000A rated solid state protection device offered in a TO-220 package and is designed to meet the severe surge requirements found in a CATV environment.

Used in Hybrid Fiber Coax (HFC) applications, the P1400AD replaces the gas tube that is traditionally used for station protection due to the P1400AD's tight voltage tolerances.



### Electrical Parameters

Part Number	$V_{ORM}$ Volts	$V_S$ Volts	$V_T$ Volts	$I_{DRM}$ $\mu$ Amps	$I_S$ mAmps	$I_T$ Amps	$I_H$ mAmps	$C_O$ pF
P1400AD	120	160	5	5	800	1	50	200

#### Notes:

- All measurements are made at an ambient temperature of 25°C.
- Listed SIDACTors are bi-directional. All electrical parameters & surge ratings apply to forward and reverse polarities.
- $V_{DRM}$  is measured at  $I_{DRM}$ .
- $V_S$  is measured at 100V/ $\mu$ s.
- Special voltage ( $V_S$  &  $V_{DRM}$ ) and holding current ( $I_H$ ) requirements are available upon request.
- Off-state capacitance is measured at 1MHz with a 2 volt bias and is a typical value.

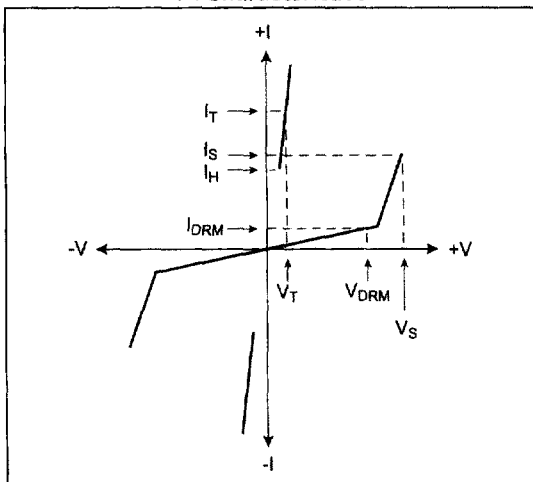
### Surge Ratings

Series	$I_{PP}$ 8x20 $\mu$ s Amps	$I_{PP}$ 10x1000 $\mu$ s Amps	$I_{TSM}$ 60Hz Amps	$di/dt$ Amps/ $\mu$ s
P1400AD	1000	250	120	500

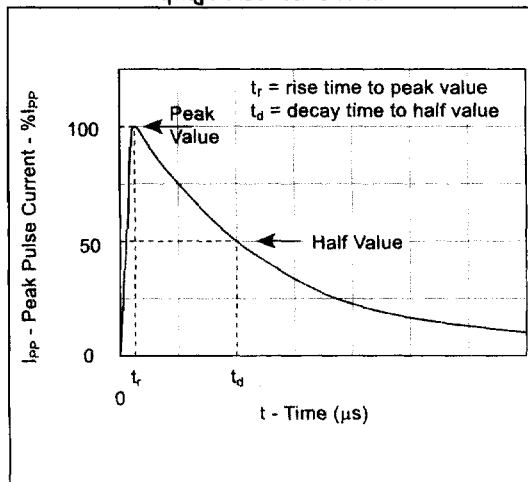
**Thermal Considerations**

Series	Symbol	Parameter	Value	Unit
P1400AD	$T_j$	Junction Temperature Range	-40 to +150	$^{\circ}\text{C}$
	$T_s$	Storage Temperature Range	-65 to +150	$^{\circ}\text{C}$
	$T_c$	Maximum Case Temperature	+75	$^{\circ}\text{C}$
	$R_{\theta jc}$	Thermal Resistance: junction to case	+28	$^{\circ}\text{C/W}$
	$R_{\theta ja}$	Thermal Resistance: junction to ambient	+90	$^{\circ}\text{C/W}$

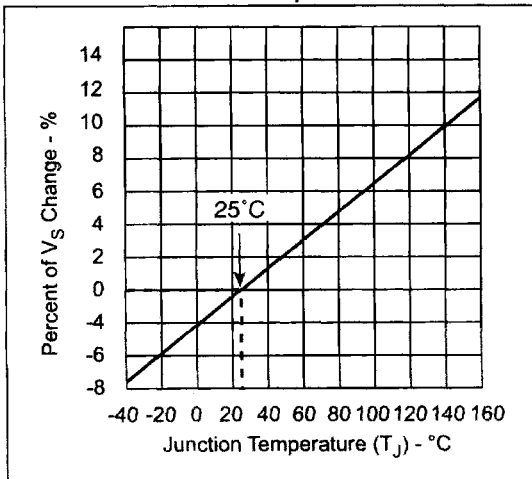
**V-I Characteristics**



**$t_r, t_d$  Pulse Wave-form**



**Normalized  $V_S$  Change vs. Junction Temperature**



**Normalized DC Holding Current vs. Case Temperature**

