CATV Series SIDACtor

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.



Part	V _{DRM}	V _S	V _T	I _{DRM}	ls	l _T	l _H	C _O
Number	Volts	Volts	Volt s	µAmps	mAmps	Amps	mAmps	pF
P1400AD	120	160	5	5	800	1	50	200

Electrical Parameters

Notes:

All measurements are made at an ambient temperature of 25°C. I_{PP} applies to -40°C through +35°C temperature range.

• IPP is a repetitive surge rating and is guaranteed for the life of the product.

• 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/µs.

• 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 _{рр} 8x20µs Атра	l _{pp} 10x1000µs Amps	I _{TSM} 80Hz Amps	di/dt Amps/µs
P1400AD	1000	250	120	500

Package	Symbol	Parameter	Value	Unit
	Tj	Junction Temperature Range	-40 to +150	°C
	Τ _s	Storage Temperature Range	-65 to +150	°C
P1400AD	Т _с	Maximum Case Temperature	80	°C
	R _{ejc}	Thermal Resistance: junction to case	2.8	°C/W
	R _{θja}	Thermal Resistance: junction to ambient	60	°C/W

Thermal Considerations

V-I Characteristics



Normalized V_S Change vs. Junction Temperature





Normalized DC Holding Current vs. Case Temperature

