

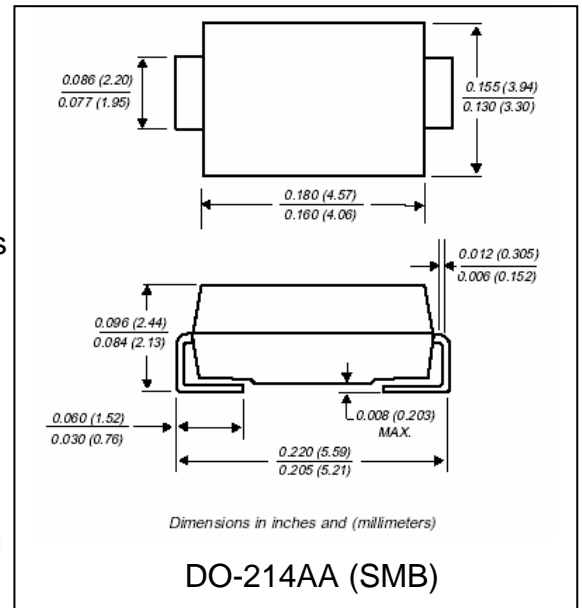
SURGE PROTECTIVE DEVICE, T2300SC

Features

- Bidirectional crowbar protection
- High repetitive surge capability
- Low capacitance
- Low leakage current
- Fast response time
- Surface-mount outline or Axial lead packages

Main Applications

- Customer Premises Equipment (CPE) modems and caller ID adjunct boxes
- T-1/E-1, ISDN, xDSL and VoIP
- Data lines and security systems
- Primary protection including main distribution



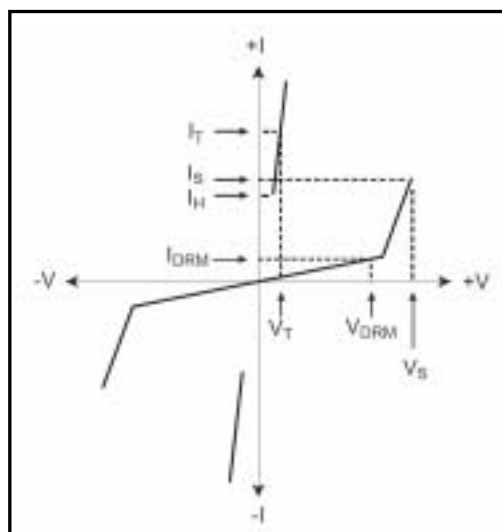
In Compliances with the Following Standards

Standard	Maximum Voltage Volts	Voltage Waveform μs	Maximum Current Amps	Current Waveform μs	SPD series
TIA/EIA-IS-968(FCC Part 68)					
Surge A Metallic	800	10x560	100	10x560	B or C
Surge A Longitudinal	1500	10x160	200	10x160	C
Surge B Metallic	1000	9x720	25	5x320	A, B, or C
Surge B Longitudinal	1500	9x720	37.5	5x320	A, B, or C
GR-1089					
Test 1	600	10x1000	100	10x1000	C
Test 2	1000	10x360	100	10x360	B or C
Test 3	1000	10x1000	100	10x1000	C
Test 4	2500	2x10	500	2x10	C
Test 5	1000	10x360	25	10x360	A, B, or C
IEC 61000-4-5					
	2000	10x700	50	5x310	A, B, or C
	4000	10x700	100	8x20	C
VDE 0433	2000	10x700	50	5x310	A, B, or C
ITU K.20					
Basic single port	1000/4000	10x700	25/100	5x310	A, B or C/B or C
Enhanced single	1500/4000	10x700	37.5/100	5x310	A, B or C/B or C
Basic multiple ports	1500/4000	10x700	37.5/100	5x310	A, B or C/B or C
Enhanced multiple	1500/6000	10x700	37.5/100	5x310	A, B or C/ C

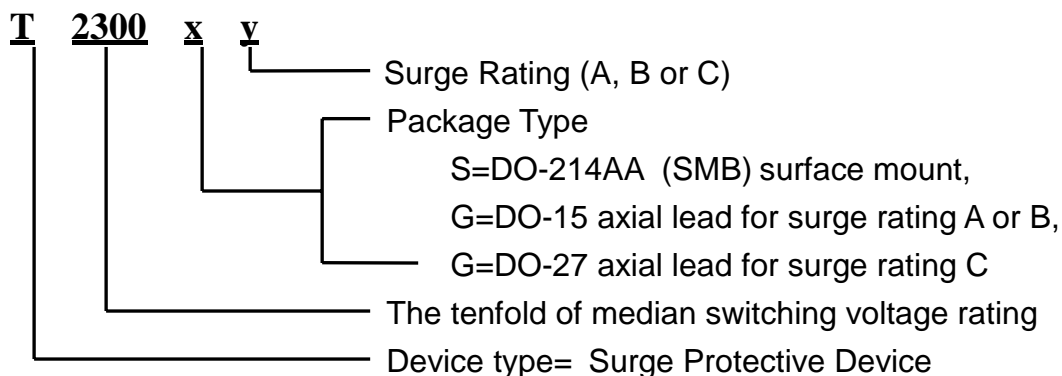
Electrical Characteristics

Parameter	Symbol	Definitions
Repetitive Peak Off-state Voltage	V_{DRM}	Rated maximum (peak) continuous voltage that can be applied in the off-state conditions.
Repetitive Peak Off-state Current	I_{DRM}	The maximum (peak) value of off-state current that results from the application of the V_{DRM} .
Switching Voltage	V_S	The instantaneous voltage across the device at the final point in the breakdown region prior to switching into the on-state measured at 100V/ms.
Switching Current	I_S	The instantaneous current flowing at the V_S .
On-state Voltage	V_T	The voltage across the device in the on-state condition at I_T .
On-state Current	I_T	The maximum rated continuous current through the device in the on-state condition.
Holding Current	I_H	The minimum current required to maintain the device in the on-state.
Off-state Capacitance	C_O	Typical capacitance in the off-state measured at 1MHz with a 2V bias.
Peak Pulse Current	I_{PP}	Rated maximum value of peak impulse pulse current applied for 10 pulses with specified current waveform without causing failure.

Note : Principal reference, JEDEC standard JESD66, Nov. 1999.



Part Number Information



Electrical Parameters(25°C unless otherwise noted)

Part Number	I _{DRM} @ V _{DRM} max.		V _S max.	I _S max.	V _T @ I _T = 1A.		I _H min.	C _O typ.	Mark
	μA	V	V	mA	V	A	mA	pF	
T2300SC	5	190	260	800	3.5	1	150	30	T23C

Note 1: For individual A, B or C surge ratings, see table below.

Note 2: Off-state capacitance (C_O) is a typical value for “A” surge rating product.

Capacitance for “B” surge rating product is approximately 1.5x the listed value.

Capacitance for “C” surge rating product is approximately 3x the listed value.

Note 3: Special requirements are available upon request.

Surge Ratings

Series	I _{PP} 2×10μs Amps	I _{PP} 8×20μs Amps	I _{PP} 10×160μs Amps	I _{PP} 10×560μs Amps	I _{PP} 10×1000μs Amps
A	150	150	90	50	45
B	250	250	150	100	80
C	500	400	200	150	100