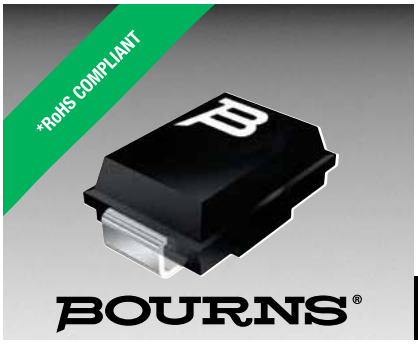


TISP4011H1BJ

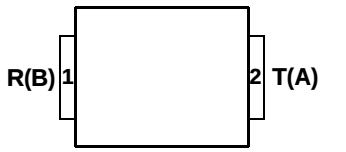
VERY LOW VOLTAGE BIDIRECTIONAL THYRISTOR OVERVOLTAGE PROTECTORS

TISP4011H1BJ VLV Overvoltage Protector Series

General Information

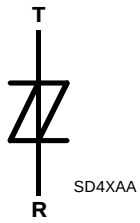
The protector consists of a symmetrical voltage-triggered bidirectional thyristor. Overvoltages are initially clipped by breakdown clamping until the voltage rises to the breakover level, which causes the device to crowbar into a low-voltage on-state condition. This low-voltage on-state causes the current resulting from the overvoltage to be safely diverted through the device. The device switches off when the diverted current falls below the holding current value.

SMB Package (Top View)



MDXXBGE

Device Symbol



SD4XAA

Terminals T and R correspond to the alternative line designators of A and B

Additional Information

Click these links for more information:

PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

Agency Recognition

Description	
UL	File Number: E215609

Absolute Maximum Ratings, T_A = 25 °C (Unless Otherwise Noted)

Rating	Symbol	Value	Unit
Repetitive peak off-state voltage	V_{DRM}	±5.25	V
Non-repetitive peak on-state pulse current 10/1000 µs 2/10 µs	I_{PPSM}	 ±100 ±500	A
Junction temperature	T_J	-40 to +150	°C
Storage temperature	T_{stg}	-55 to +150	°C

Electrical Characteristics, T_A = 25 °C (Unless Otherwise Noted)

Parameter		Test Conditions	Min.	Typ.	Max.	Unit
I_D	Leakage current	$V_D = V_{DRM}$		1	200	µA
$V_{(BO)}$	Breakover voltage	di/dt = ±1 mA/µs		9	10.5	V
$I_{(BO)}$	Breakover current	di/dt = ±1 mA/µs		75	200	mA
V_T	On-state voltage	I_T = ±5 A			3	V
I_H	Holding current	I_T = ±5 A, di/dt = ±1 mA/µs	20	60		mA
C_{off}	Off-state capacitance	V_d = 0 V, f = 1 MHz, 1 Vrms		110		pF

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*RoHS Directive 2015/863, Mar 31, 2015 and Annex.
Specifications are subject to change without notice.
Users should verify actual device performance in their specific applications.
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WARNING Cancer and Reproductive Harm
www.P65Warnings.ca.gov

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Parameter Measurement Information

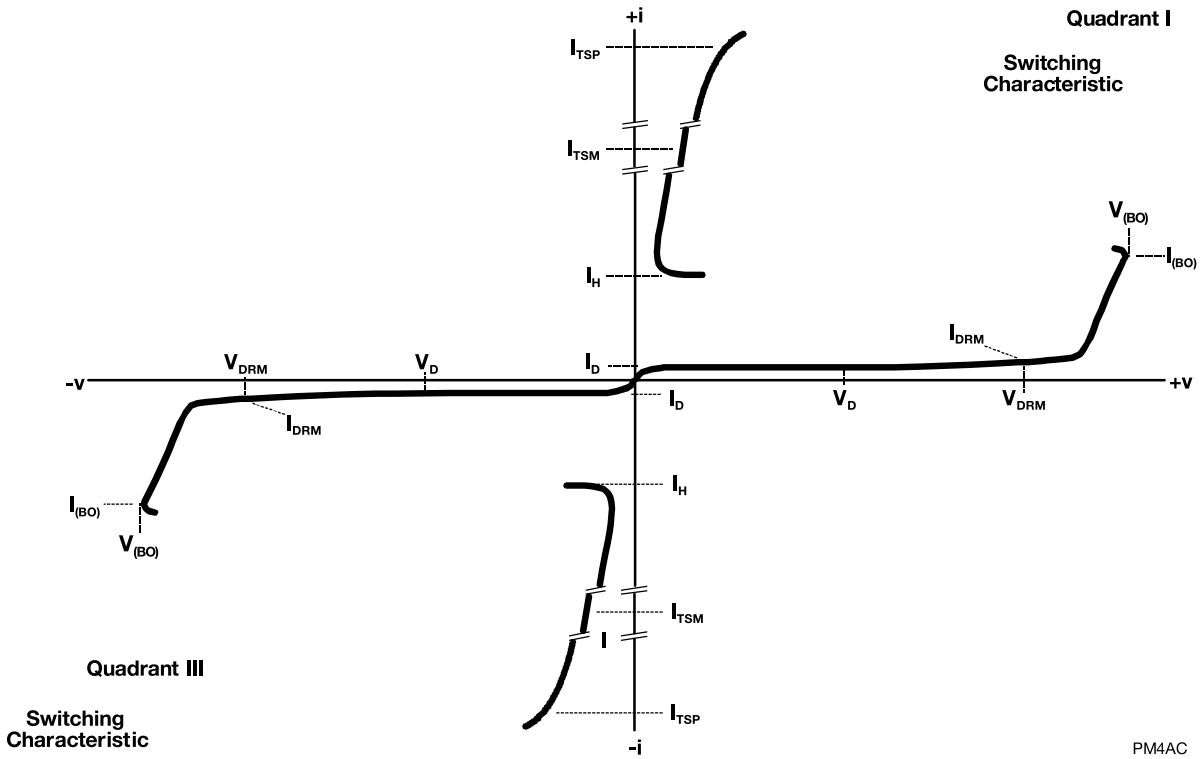


Figure 1. Voltage-Current Characteristic for T and R Terminals
All Measurements are Referenced to the R Terminal

How to Order

Device	Package	Carrier	Order as
TISP4011H1BJ	BJ (SMB/DO-214AA J-Bend)	R (Embossed Tape Reeled)	TISP4011H1BJR-S

Carrier Information

For production quantities, the carrier will be embossed tape reel pack. Evaluation quantities may be shipped in bulk pack or embossed tape.

Package	Carrier	Standard Quantity
SMB	Embossed Tape Reel Pack	3000

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- Bourns expressly identifies Bourns® standard products that are suitable for use in the typical aviation applications/systems requiring System Design Assurance Level (RTCA DO-254 DAL) of C, D or E in its publication entitled "Bourns Civilian Aerospace/Aviation Grade Component Guide." Bourns does not test its products for compliance with United States Federal Aviation Administration standards or any other generally equivalent governmental organization standard applicable to products designed or manufactured for use in aviation applications. Use of Bourns® standard components in aviation applications associated with RTCA DO-254 DAL A or B without proper approval noted above shall be at the user's sole risk.

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