



MICRO SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 400~1000 Volt CURRENT 1.2 Amper

FEATURES

- Glass Passivated Chip Junciton
- Ideally Suited for Automatic Assembly
- Save Space On Printed Circuit Boards
- Ultra Thin Profile Package for Space Constrained Utilization
- Low Forward Voltage Drop
- Plastic Material: UL Flammability Classification Rating 94V-0
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

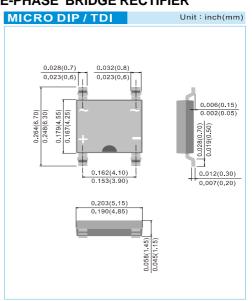
· Case: TDI, Plastic

• Terminals : Solderable per MIL-STD-750, Method 2026

· Polarity: As Marked on case

• Weight: 0.003 ounces, 0.089 grams (Approx.)

• Marking : Part number



ABSOLUTE MAXIMUM RATINGS (If not specified Ta=25°C)

PARAMETER	SYMBOL	TB4S-12	TB6S-12	TB8S-12	TB10S-12	UNIT
Maximum Recurrent Peak Reverse Voltage		400	600	800	1000	V
Maximum RMS Voltage	VRMS	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	400	600	800	1000	V
Maximum Average Rectified Forward Current	I F(AV)	1.2				Α
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load per diode	IFSM		5	0		А
I ²t Rating for fusing (t<8.3ms)	I²t	10.375				A ² sec
Operating Junction Temperature Range		150				°C
Storage Temperature Range	Тѕтѕ	-55 to +150				°C

ELECTRICAL CHARACTERISTICS (If not specified Ta=25°C)

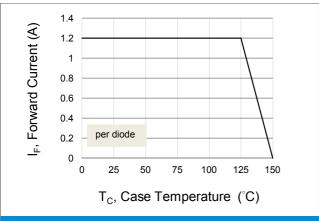
PARAMETER	SYMBOL	CONDITIONS	MAX.	UNIT
Forward Voltage	V _F	I F=1.2A,Pulse measurement, Rating of per diode	1.1	V
Reverse Current	I _R	At VRRM,Pulse measurement, Rating of per diode		μА
Typical thermal	R _{eJC} Junction to case (Note 1)		25(typ.)	
Resistance Per Diode	$R_{_{\theta JA}}$	Junction to ambient (Note 2)	160(typ.)	°C/W

NOTE:

- 1. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.
- 2. Mounted on a FR4 PCB, single-sided copper, mini pad.



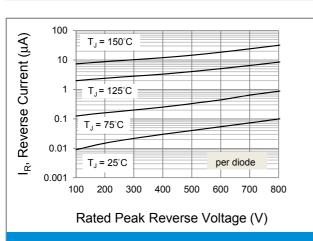




O V_R, Reverse Bias Voltage (V)

Fig.1 Forward Current Derating Curve Fig.2 Typical Junction Capacitance

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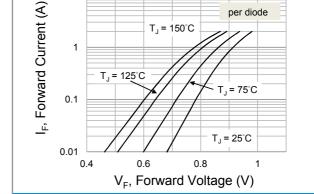


Fig.3 Typical Reverse Characteristics

Fig.4 Typical Forward Characteristics

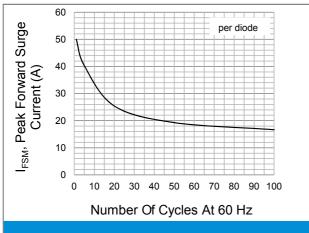
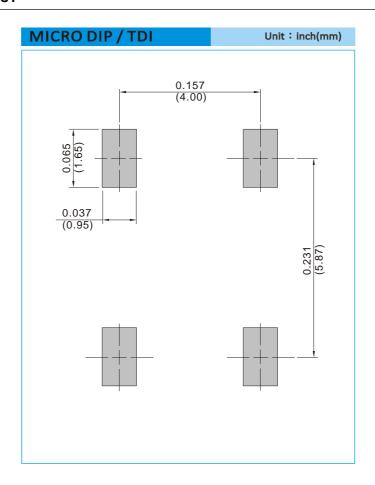


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current Uni-Directional Use Only





MOUNTING PAD LAYOUT



ORDER INFORMATION

• Packing information

T/R - 4K per 13" plastic Reel

T/R - 1K per 7" plastic Reel





Part No_packing code_Version

TB4S-12_R1_00001 TB4S-12_R2_00001

For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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