



# TB1S~TB10S

## MICRO SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

**VOLTAGE** 100~1000 Volts **CURRENT** 1.0 Amperes

TDI(MICRO DIP)

Unit : inch(mm)



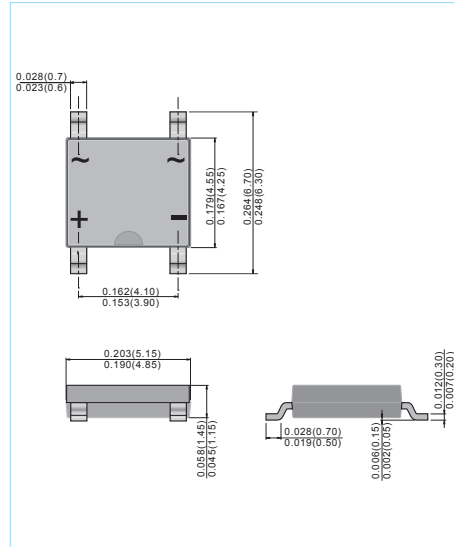
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### FEATURES

- Glass passivated chip junction
- Ideally Suited for Automatic Assembly
- Save space on printed circuit boards
- Body Thick Very Thin <1.5mm
- Low Forward Voltage Drop
- Surge Overload Rating to 30A peak
- In compliance with EU RoHS 2002/95/EC directives
- Plastic Material:UL Flammability Classification Rating 94V-0

### MECHANICAL DATA

- Case : TDI, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity: As Marked on case
- Marking: Type number
- Weight: 0.090 grams (Approx.)



### ABSOLUTE MAXIMUM RATINGS (If not specified $T_A=25^\circ\text{C}$ )

PARAMETER	SYMBOL	CONDITIONS	TB1S	TB2S	TB4S	TB6S	TB8S	TB10S	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	-	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	-	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	-	100	200	400	600	800	1000	V
Average Rectified Forward Current	$I_o$	60Hz sine wave, R-load, $T_A=25^\circ\text{C}$ On FR-4 P.C.B Board	1.0						A
Peak Surge Forward Current	$I_{FSM}$	60Hz sine wave, Non-repetitive 1 cycle peak value, $T_J=25^\circ\text{C}$	30						A
$I^2t$ Rating for fusing ( $t<8.3\text{ms}$ )	$I^2t$	-	3.735						$\text{A}^2\text{S}$
Operating Junction Temperature	$T_J$	-	150						$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-	-55 to +150						$^\circ\text{C}$

PAN JIT RESERVES THE RIGHT TO CHANGE THE SPECIFICATION ANY TIME WITHOUT NOTICE IN ORDER TO IMPROVE THE DESIGN AND SUPPLY THE BEST POSSIBLE PRODUCT.



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## ELECTRICAL CHARACTERISTICS (If not specified $T_A=25^\circ\text{C}$ )

PARAMETER	SYMBOL	CONDITIONS	MAX.	UNIT
Forward Voltage	$V_F$	$I_F=1\text{A}$ , Pulse measurement, Rating of per diode	1.1	V
Reverse Current	$I_R$	At $V_{RRM}$ , Pulse measurement, Rating of per diode	10	$\mu\text{A}$
Typical Junction capacitance	$C_J$	$V_R=4\text{V}$ , $f=1\text{MHz}$	10	pF
Thermal Resistance	$R_{\theta JC}$	Junction to case	70	$^\circ\text{C/W}$
	$R_{\theta JA}$	Junction to ambient, On FR-4 P.C.B Board	95	

### RATING AND CHARACTERISTIC CURVES

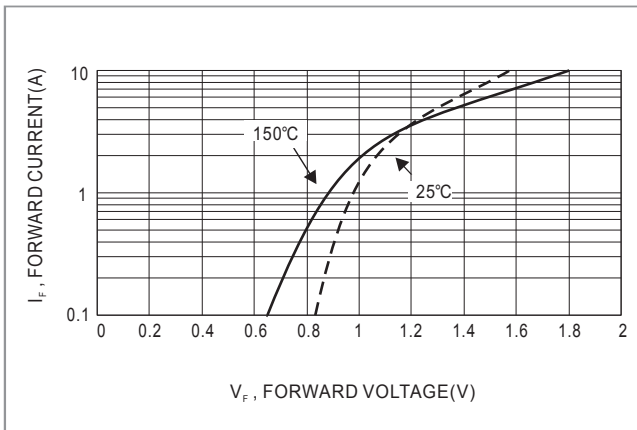


Fig.1 -TYPICAL FORWARD CHARACTERISTICS

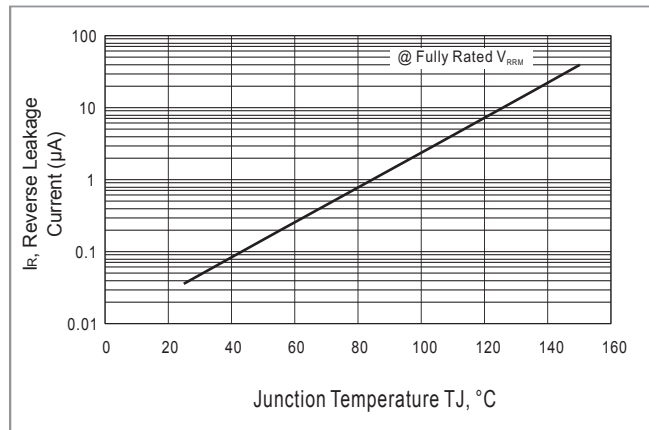


FIG-2 TYPICAL LEAKAGE CURRENT vs JUNCTION TEMPERATURE

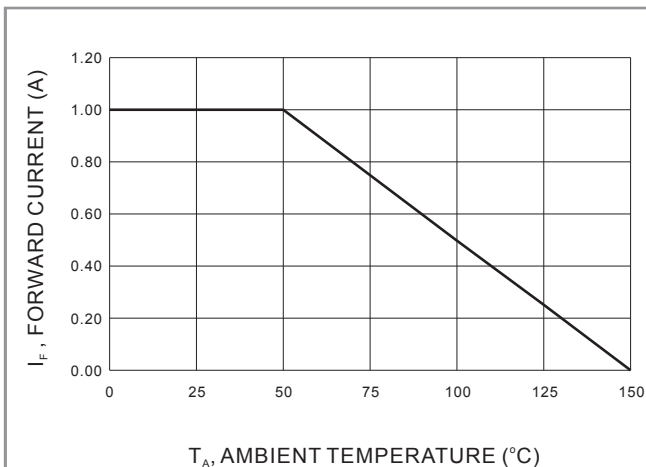
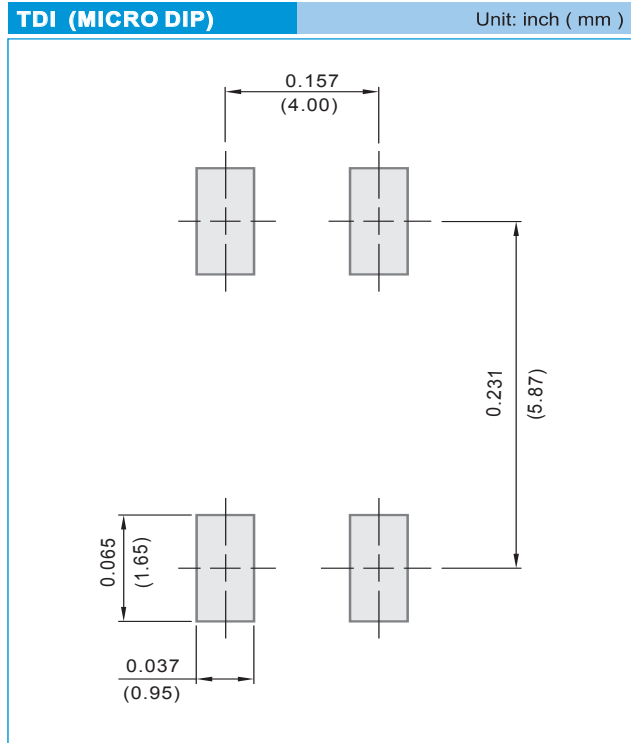


FIG3- DERATING CURVE



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## MOUNTING PAD LAYOUT



## ORDER INFORMATION

- Packing information
  - T/R - 4K per 13" plastic Reel
  - T/R - 1K per 7" plastic Reel

## LEGAL STATEMENT

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