



TB1S~TB10S

MICRO SURFACE MOUNT GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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

TDI(MICRO DIP)

Unit : Inch(mm)



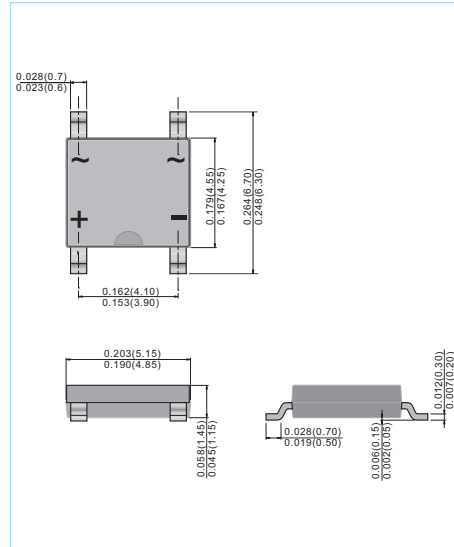
Recognized File #E139973

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 |
| $I^2 t$ Rating for fusing ($t < 8.3\text{ms}$) | $I^2 t$ | - | 3.735 | | | | | | A^2S |
| 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 | μA |
| 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

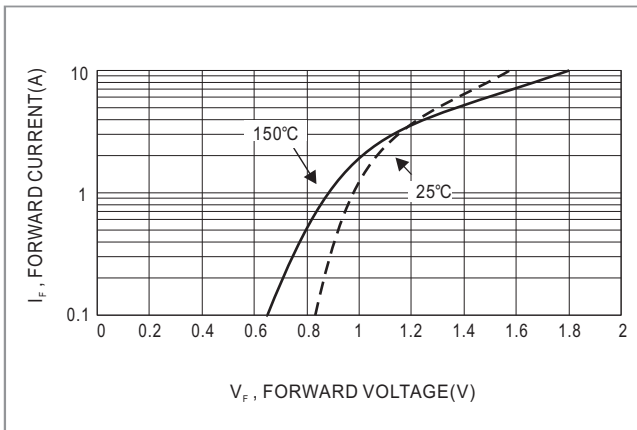


Fig.1 -TYPICAL FORWARD CHARACTERISTICS

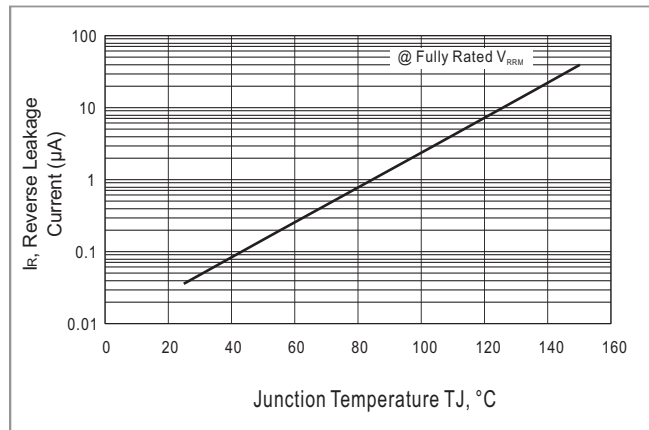


FIG-2 TYPICAL LEAKAGE CURRENT vs JUNCTION TEMPERATURE

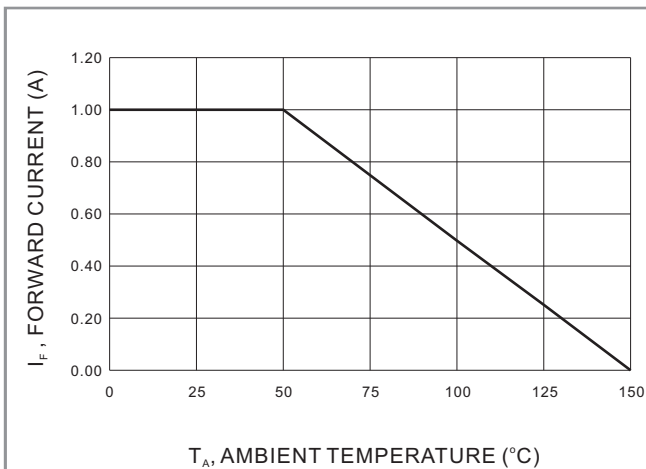
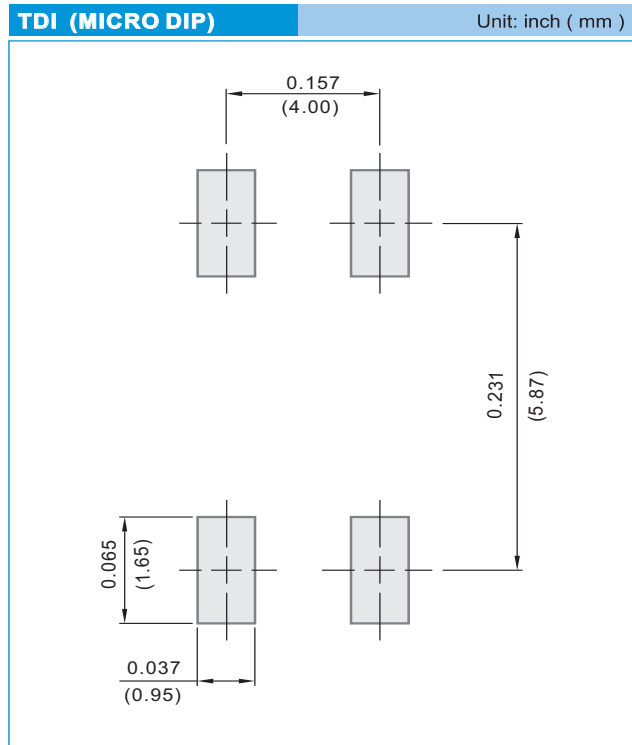


FIG 3- DERATING CURVE



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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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