



# TS1100S

## MICRO SURFACE MOUNT SCHOTTKY BRIDGE

**VOLTAGE** 100 Volt **CURRENT** 1 Ampere

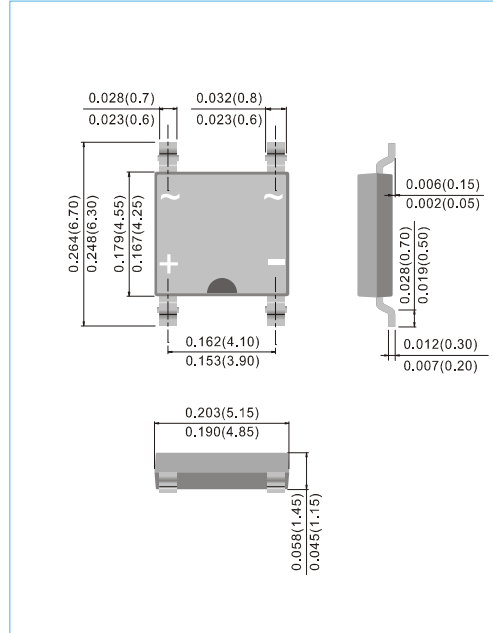
**MICRO DIP / TDI** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- Super fast recovery times, high voltage.
- Epitaxial chip construction.
- Lead free in compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

### MECHANICAL DATA

- Case: MICRO DIP / TDI Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.003 ounce, 0.09 gram



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

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Maximum RMS Reverse Voltage	$V_{RMS}$	71	V
Maximum DC Blocking Voltage	$V_{DC}$	100	V
Maximum Average Forward Current	$I_{F(AV)}$	1	A
Non-Repetitive Peak Surge Current (Surge applied at rate Load conditions halfwave, single phase, 60Hz)	$I_{FSM}$	30	A
Maximum Thermal Resistance (Note 1)	$R_{\theta JA}$	85	$^{\circ}\text{C}/\text{W}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	145	$^{\circ}\text{C}/\text{W}$
Typical Thermal Resistance(Note 1)	$R_{\theta JC}$	35	$^{\circ}\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-50 to +125	$^{\circ}\text{C}$

#### NOTE :

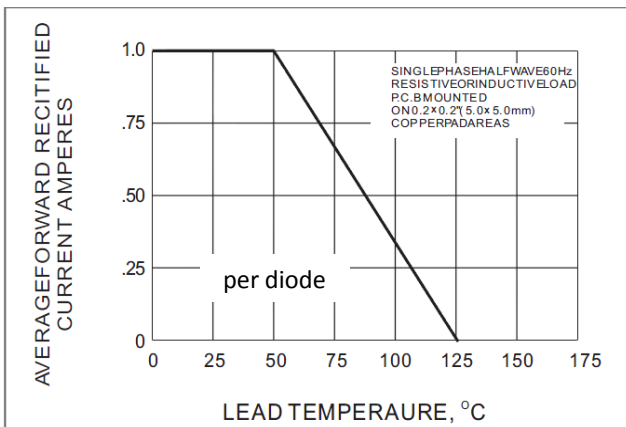
1. Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area
2. Mounted on a FR4 PCB, single-sided copper, mini pad



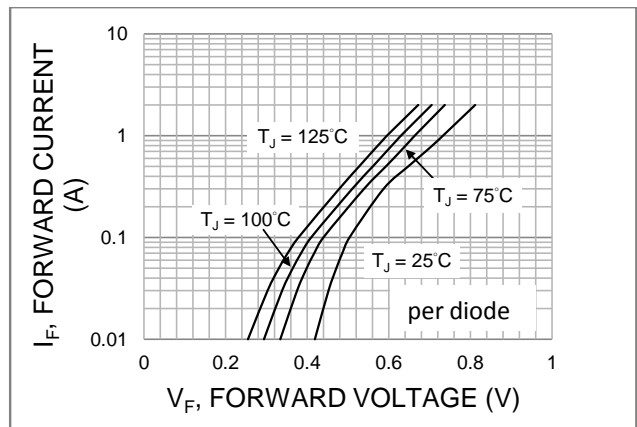
# TS1100S

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

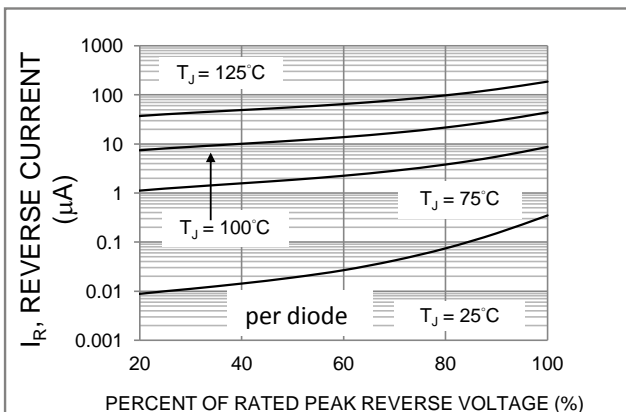
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Reverse Current	$I_R$	$V_R=100\text{V}$	-	0.3	10	$\mu\text{A}$
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=150\mu\text{A}$	100	115	-	V
Forward Voltage	$V_F$	$I_F=500\text{mA}$	-	650	700	mV
Forward Voltage	$V_F$	$I_F=1\text{A}$	-	730	750	mV
Typical Junction Capacitance	$C_J$	$V_R=4\text{V}, f=1\text{MHz}$	-	85	-	pF



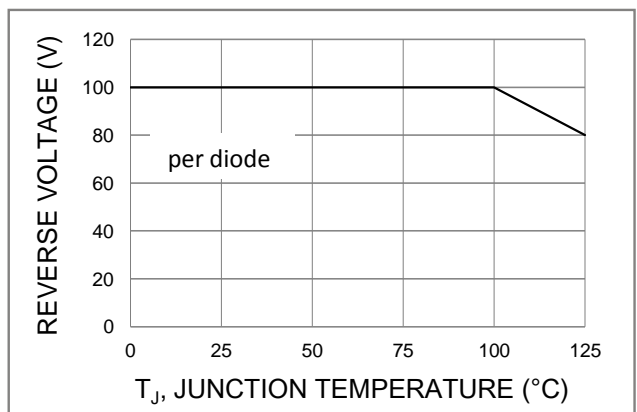
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



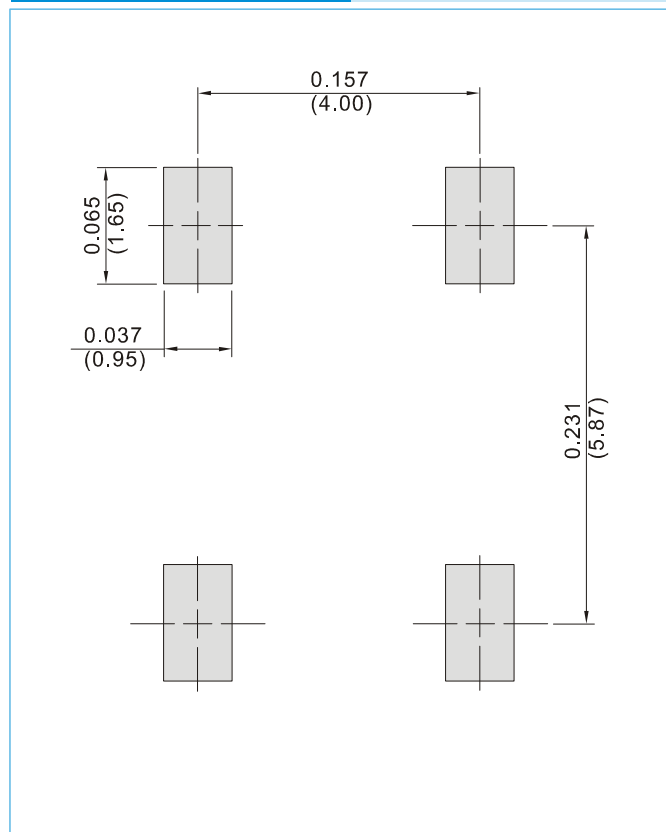
**Fig.4 Operating Temperature Derating Curve**



# TS1100S

## MOUNTING PAD LAYOUT

### MICRO DIP / TDI Unit : inch(mm)



## ORDER INFORMATION

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



# TS1100S

## Part No\_packing code\_Version

TS1100S\_R1\_00001

TS1100S\_R2\_00001

For example :

**RB500V-40\_R2\_00001**



Packing Code <b>XX</b>				Version Code <b>XXXXX</b>		
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	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			



## TS1100S

---

### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.