



# TS1100S

## MICRO SURFACE MOUNT SCHOTTKY BRIDGE

<b>VOLTAGE</b>	<b>100 Volt</b>	<b>CURRENT</b>	<b>1 Ampere</b>
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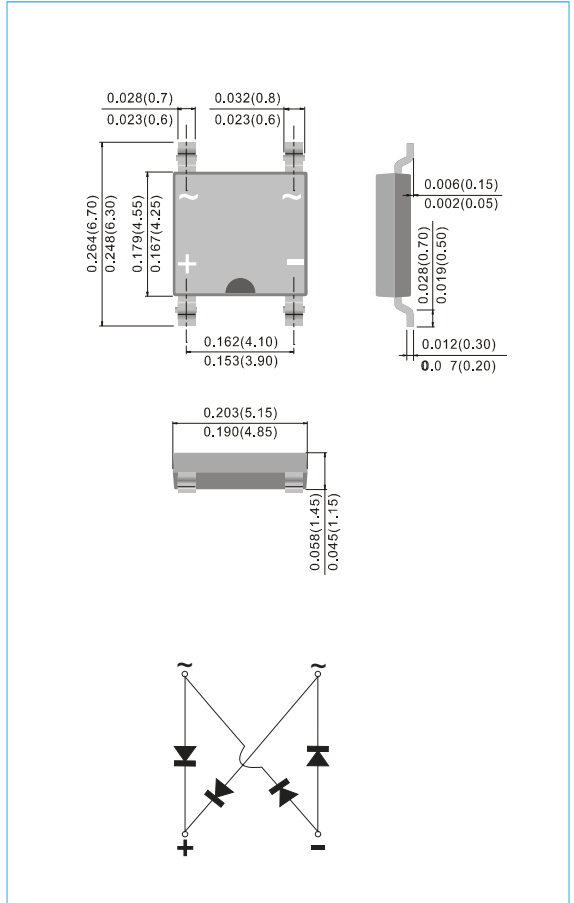
**MICRO DIP / TDI** Unit : inch(mm)

### 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 2.0
- Green molding compound as per IEC 61249 standard

### 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	$^\circ\text{C/W}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	145	$^\circ\text{C/W}$
Typical Thermal Resistance(Note 1)	$R_{\theta JC}$	35	$^\circ\text{C/W}$
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	-50 to +125	$^\circ\text{C}$

NOTE :

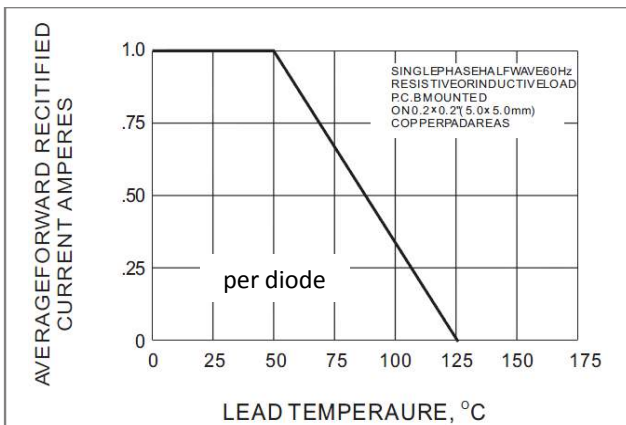
- 1.Mounted on a FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area
- 2.Mounted on a FR4 PCB, single-sided copper, mini pad



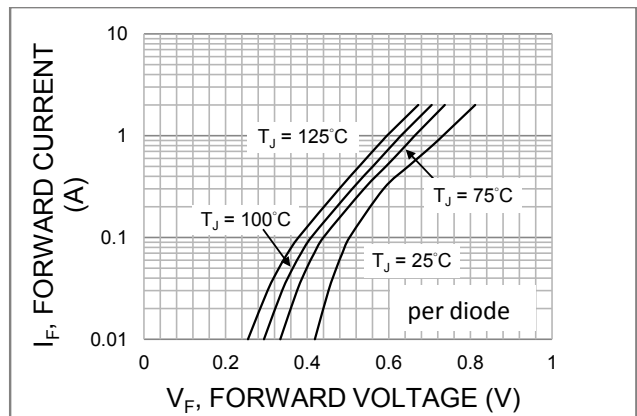
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## ELECTRICAL CHARACTERISTICS (If not specified $T_A=25^\circ\text{C}$ )

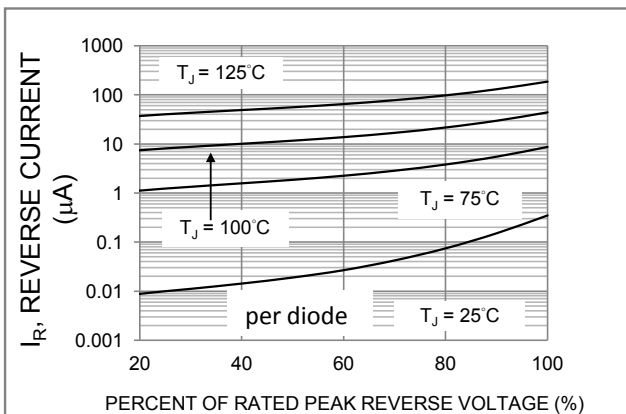
PARAMETER	SYMBOL	CONDITIONS	MIN.	TYP.	MAX.	UNIT
Reverse Current	$I_R$	$V_R=100\text{V}$	-	0.3	10	A
Reverse Breakdown Voltage	$V_{(BR)R}$	$I_R=150\text{ A}$	100	115	-	V
Forward Voltage	$V_F$	$I_F=500\text{mA}$	-	650	700	mV
Forward Voltage	$V_F$	$I_F=1\text{ A}$	-	730	750	mV
Typical Junction Capacitance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



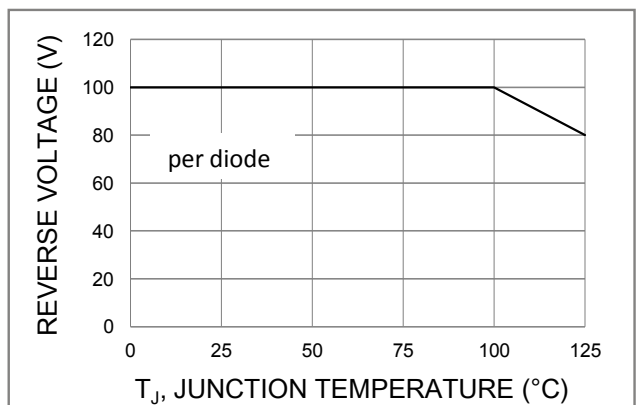
**Fig.1 Forward Current Derating Curve**



**Fig.2 Typical Junction Capacitance**



**Fig.3 Typical Reverse Characteristics**



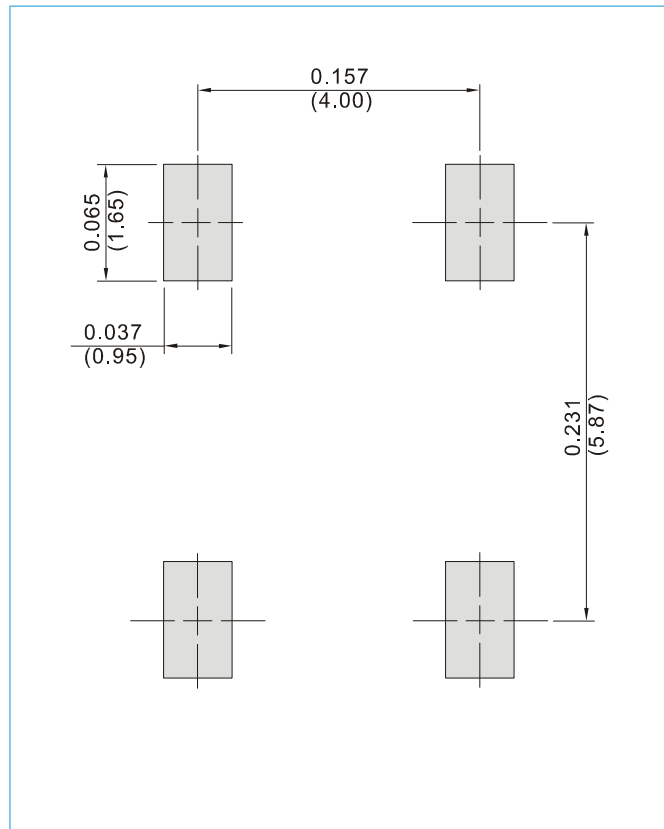
**Fig.4 Operating Temperature Derating Curve**



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## 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)	<b>A</b>	N/A	<b>0</b>	<b>HF</b>	<b>0</b>	serial number
Tape and Reel (T/R)	<b>R</b>	7"	<b>1</b>	<b>RoHS</b>	<b>1</b>	serial number
Bulk Packing (B/P)	<b>B</b>	13"	<b>2</b>			
Tube Packing (T/P)	<b>T</b>	26mm	<b>X</b>			
Tape and Reel (Right Oriented) (TRR)	<b>S</b>	52mm	<b>Y</b>			
Tape and Reel (Left Oriented) (TRL)	<b>L</b>	PANASERT T/B CATHODE UP (PBCU)	<b>U</b>			
FORMING	<b>F</b>	PANASERT T/B CATHODE DOWN (PBCD)	<b>D</b>			



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