



# TS2100S

## MICRO SURFACE MOUNT SCHOTTKY BRIDGE

**VOLTAGE** 100 Volt **CURRENT** 2 Ampere

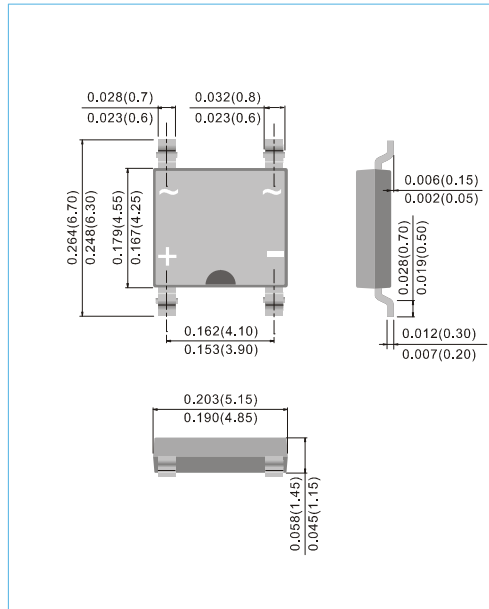
**MICRO DIP / TDI** Unit : inch(mm)

### FEATURES

- Plastic package has Underwriters Laboratory. Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228.
- 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: TDI Molded plastic
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Standard packaging: Any
- Weight: 0.0032 ounce, 0.09 gram



## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNITS
Maximum Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	V
Maximum RMS Reverse Voltage	V <sub>RMS</sub>	70	V
Maximum DC Blocking Voltage	V <sub>R</sub>	100	V
Maximum Average Forward Current T <sub>C</sub> =50°C	I <sub>F(AV)</sub>	2	A
Non-Repetitive Peak Surge Current (Surge applied at rate Load conditions halfware, single phase, 60Hz)	I <sub>FSM</sub>	50	A
Typical Thermal Resistance, Junction to Ambient (Note1)	R <sub>θJA</sub>	95	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

### NOTES :

1. Mounted on minimum pad layout (1cm x 1cm FR-4 board).



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## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	CONDITIONS	MIN	TYP	MAX.	UNIT
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =100V	-	-	4	μA
Reverse Breakdown Voltage	V <sub>(BR)R</sub>	I <sub>R</sub> =150μA	100	-	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =2A	-	770	840	mV
Typical Junction Capacitance	C <sub>J</sub>	V <sub>R</sub> =4V, f=1MHz	-	110	-	pF

### RATING AND CHARACTERISTIC CURVES

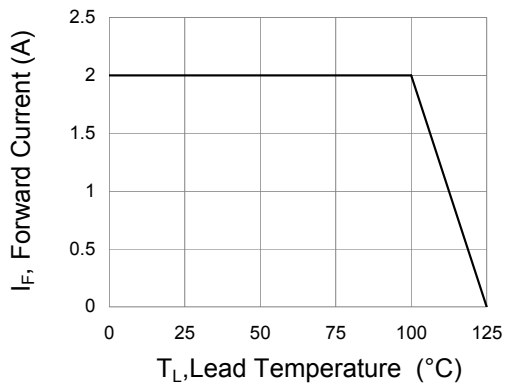


Fig.1 Forward Current Derating Curve

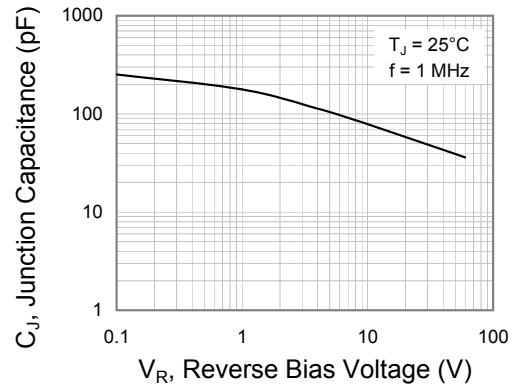


Fig.2 Typical Junction Capacitance

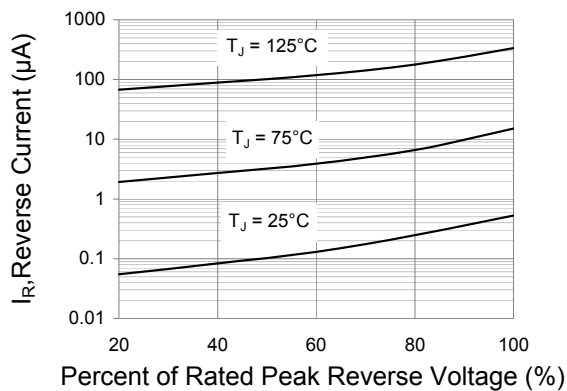


Fig.3 Typical Reverse Characteristics

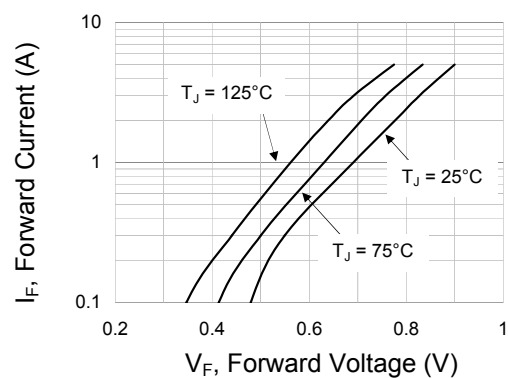


Fig.4 Typical Forward Characteristics

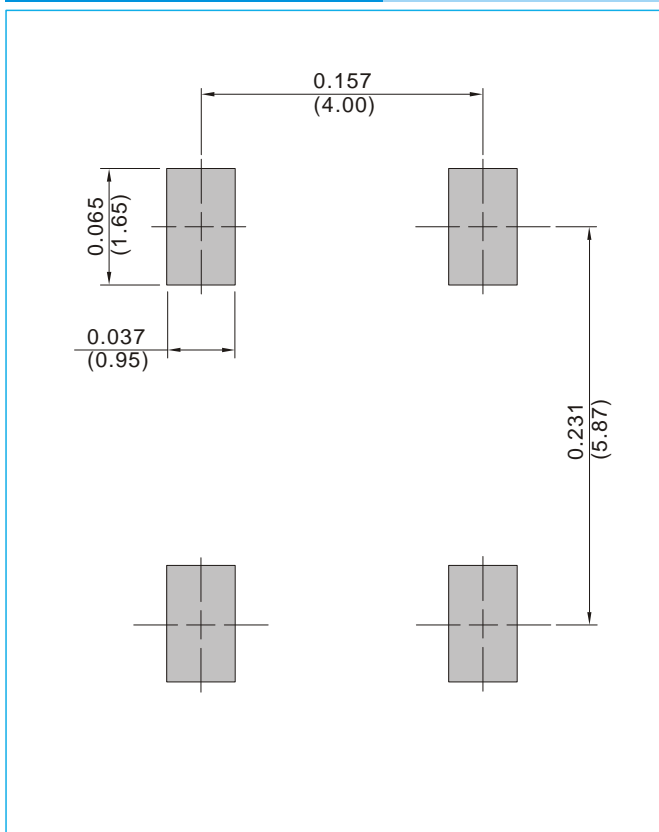


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## MOUNTING PAD LAYOUT

**MICRO DIP / TDI**

Unit : inch(mm)



## ORDER INFORMATION

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



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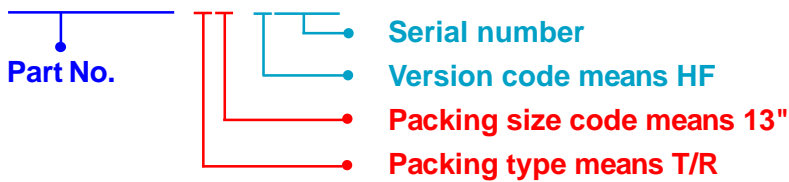
**Part No\_packing code\_Version**

TS2100S\_R1\_00001

TS2100S\_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			



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