



# TR10S-20-LE

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

**Voltage**

**1000 V**

**Current**

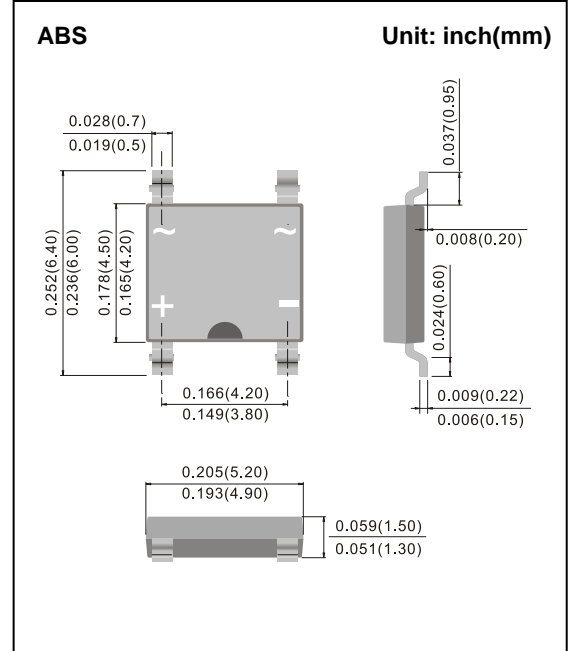
**2 A**

### Features

- Glass passivated chip junction
- Ideally suited for automatic assembly
- Save space on printed circuit boards
- Ultra thin profile package for space constrained utilization
- Low forward voltage drop
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### Mechanical Data

- Case: ABS, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: As Marked on case
- Weight: 0.033 ounces, 0.093 grams



### Maximum Ratings And Electrical Characteristics (T<sub>A</sub>=25° C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	1000	V
Maximum rms voltage	V <sub>RMS</sub>	700	V
Maximum dc blocking voltage	V <sub>R</sub>	1000	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	2	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50	A
Maximum forward voltage at 2A	V <sub>F</sub>	1.3	V
Typical thermal resistance	(Note 1) R <sub>θJA</sub>	160	°C/W
	(Note 2) R <sub>θJC</sub>	40	
	(Note 2) R <sub>θJL</sub>	30	
Typical junction capacitance (V <sub>R</sub> =4V, f=1MHz)	C <sub>J</sub>	22	pF
Maximum Reverse Recovery Time (Note 3)	T <sub>RR</sub>	200	ns
Operating junction temperature range	T <sub>J</sub>	-55 to +150	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Note : 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

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

3. Reverse Recovery Test Conditions : IF=0.5A, IR=-1A, Recovery to -0.25A



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Maximum Ratings And Electrical Characteristics ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)

PARAMETER		SYMBOL	VALUE	UNIT
Maximum dc reverse current at rated dc blocking voltage	$T_J = 25^{\circ}\text{C}$	$I_R$	5	$\mu\text{A}$
	$T_J = 125^{\circ}\text{C}$		100	
Rating for fusing ( $t < 8.3\text{ms}$ )		$I^2t$	10.37	$\text{A}^2\text{sec}$



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## TYPICAL CHARACTERISTIC CURVES

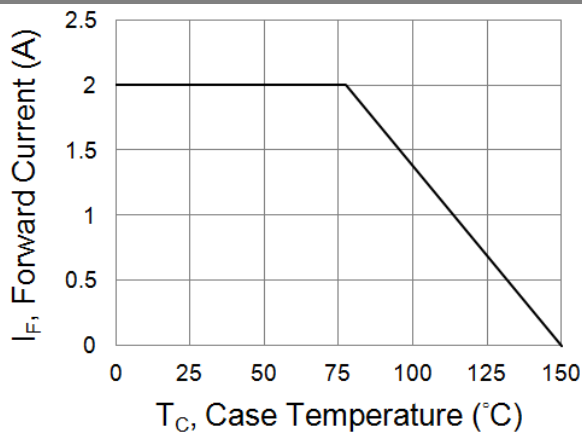


Fig.1 Forward Current Derating Curve

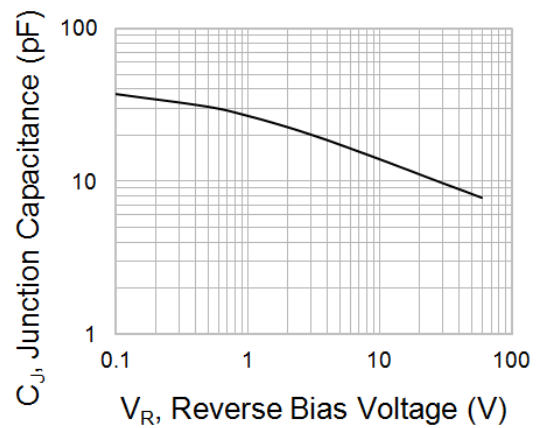


Fig.2 Typical Junction Capacitance

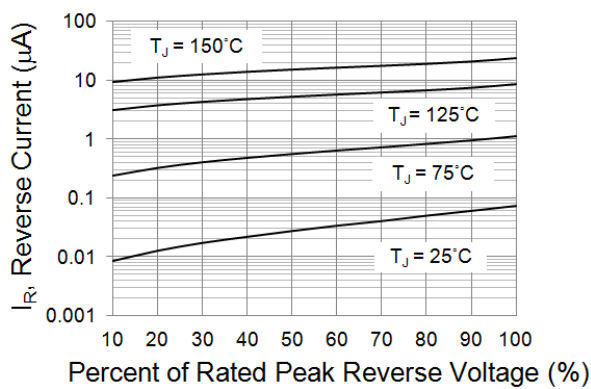


Fig.3 Typical Reverse Characteristics

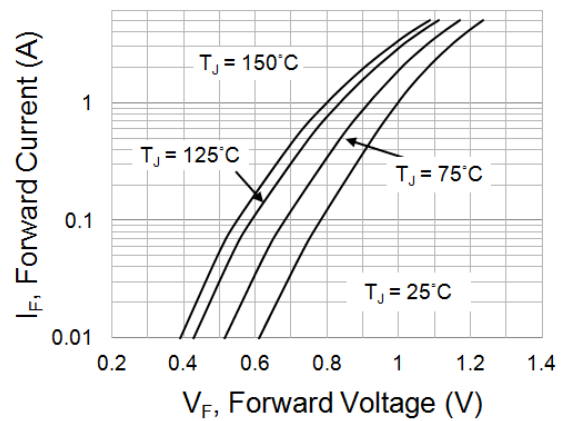


Fig.4 Typical Forward Characteristics

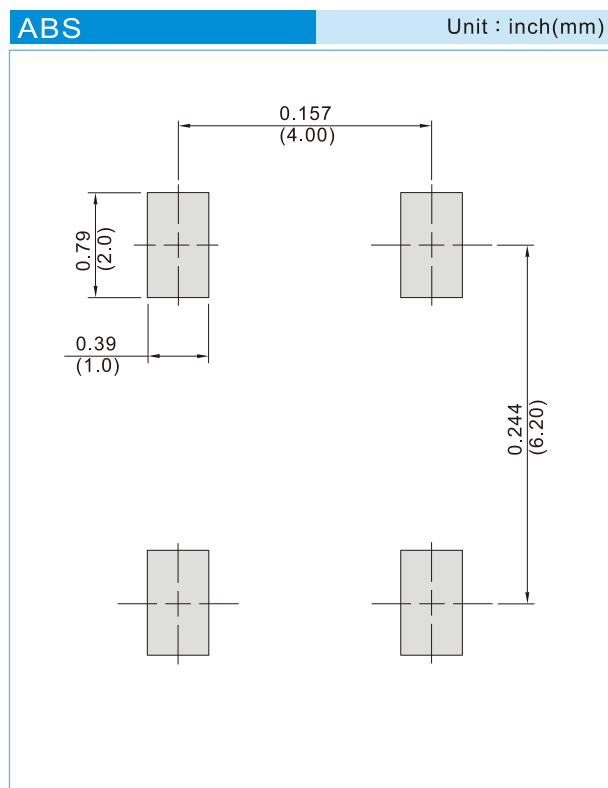


# TR10S-20-LE

## PART NO PACKING CODE VERSION

Part No Packing Code	Package Type	Packing Type	Marking	Version
TR10S-20-LE_R2_00001	ABS	4K pcs / 13" reel	RBS210	Halogen free

## MOUNTING PAD LAYOUT





## TR10S-20-LE

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