

### FEATURES:

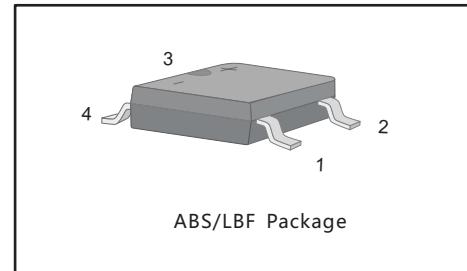
- Glass Passivated Chip Junction
- Reverse Voltage - 40 to 200 V
- Forward Current - 3 A
- High Surge Current Capability
- Designed for Surface Mount Application

### MECHANICAL DATA

- Case: ABS/LBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 88mg 0.0029oz

### PINNING

PIN	DESCRIPTION
1	Input Pin ( ~ )
2	Input Pin ( ~ )
3	Output Anode ( + )
4	Output Cathode ( - )



### Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

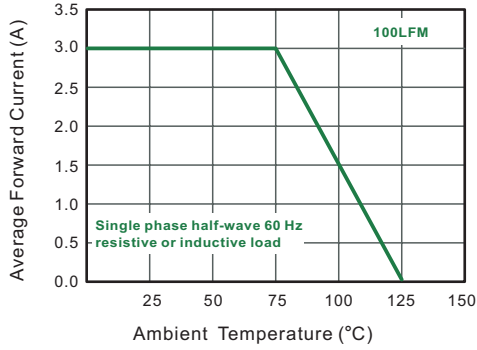
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	TB34S	TB36S	TB38S	TB310S	TB320S	Units
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	40	60	80	100	200	V
Maximum RMS voltage	$V_{RMS}$	28	42	56	70	140	V
Maximum DC Blocking Voltage	$V_{DC}$	40	60	80	100	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0					A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80		70			A
Max Instantaneous Forward Voltage at 3 A	$V_F$	0.55	0.70	0.85		0.95	V
Maximum DC Reverse Current $T_a = 25^{\circ}C$ at Rated DC Reverse Voltage $T_a = 100^{\circ}C$	$I_R$	0.5 10	0.3 5				mA
Typical Junction Capacitance <sup>1)</sup>	$C_j$	250	160				pF
Typical Thermal Resistance <sup>2)</sup>	$R_{\theta JA}$	40					$^{\circ}C/W$
Operating Junction Temperature Range	$T_j$	-55 ~ +125					$^{\circ}C$
Storage Temperature Range	$T_{stg}$	-55 ~ +150					$^{\circ}C$

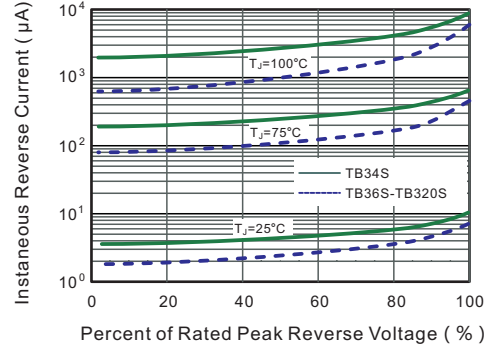
Note: 1. Measured at 1MHz and applied reverse voltage of 4 V D.C.

2. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> copper pad.

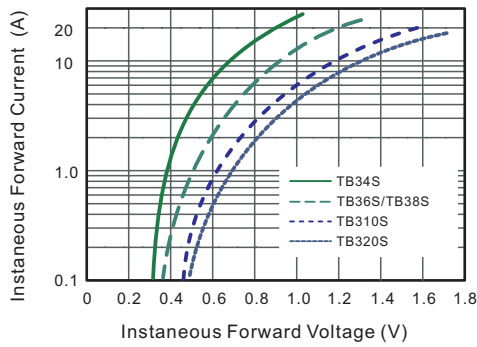
**Fig.1 Forward Current Derating Curve**



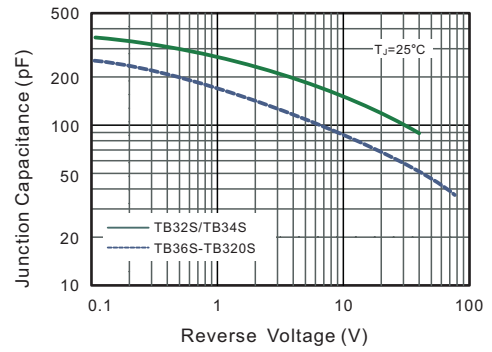
**Fig.2 Typical Reverse Characteristics**



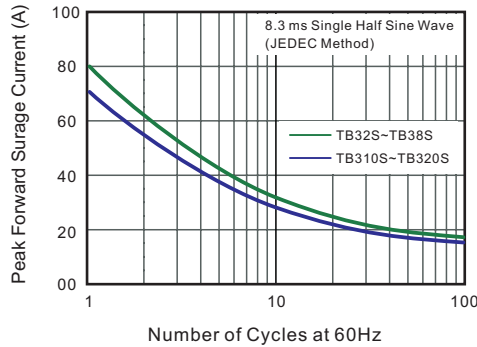
**Fig.3 Typical Forward Characteristic**



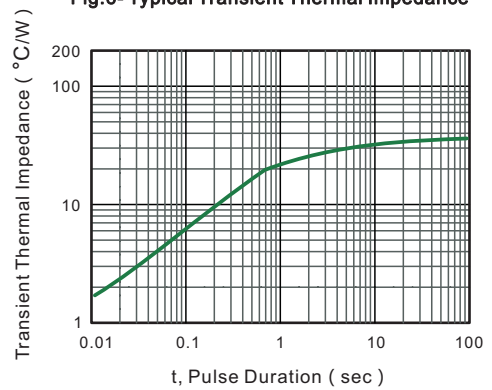
**Fig.4 Typical Junction Capacitance**



**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



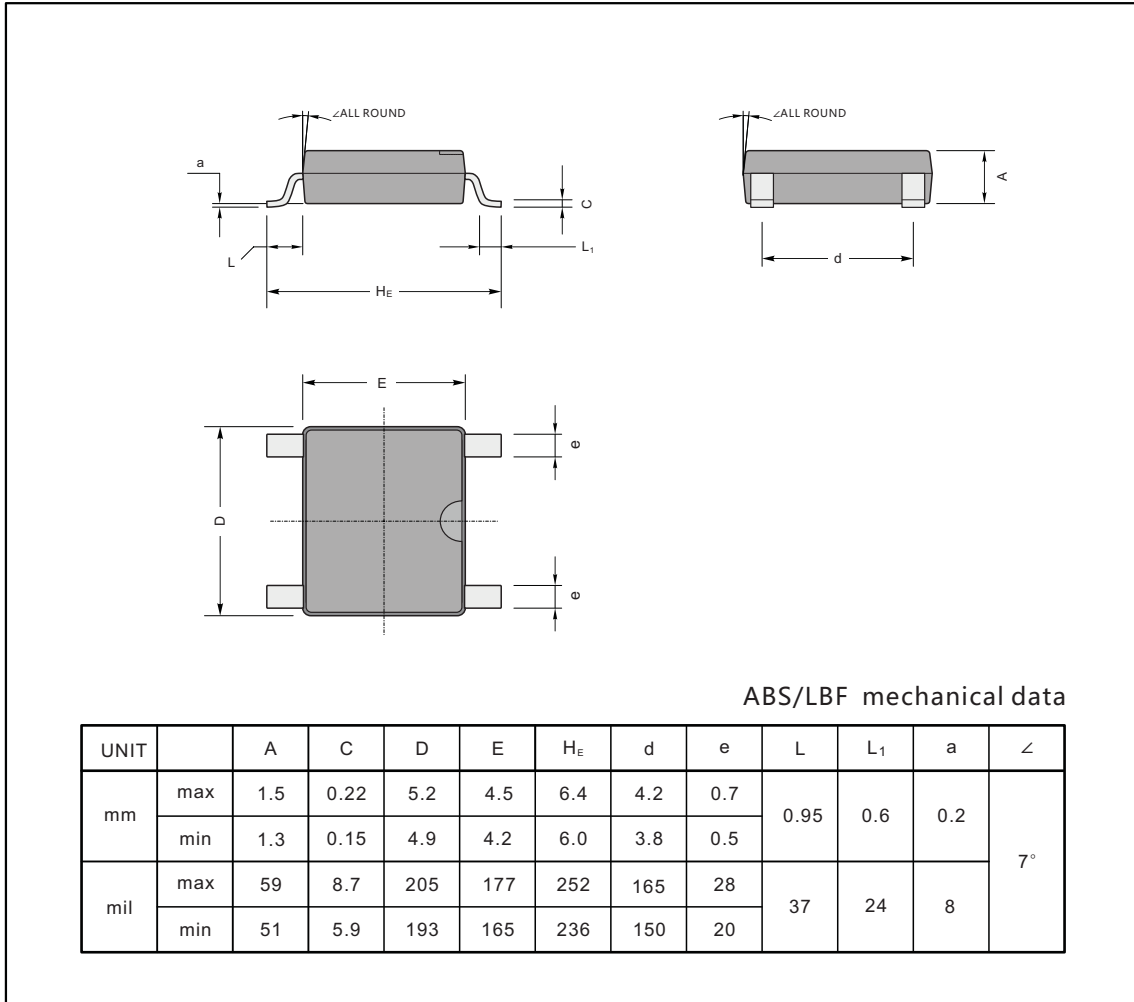
**Fig.6- Typical Transient Thermal Impedance**



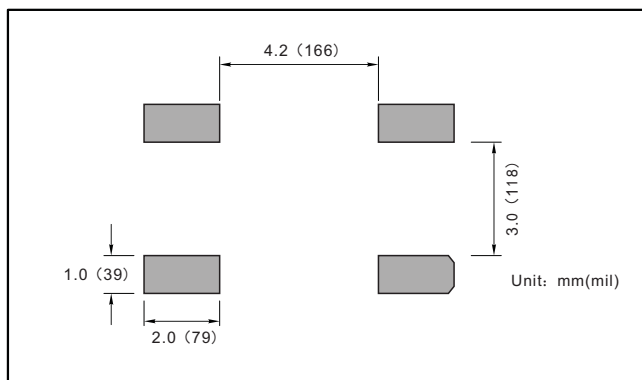
### PACKAGE OUTLINE

Plastic surface mounted package; 4 leads

ABS/LBF



### The recommended mounting pad size



### Marking

Type number	Marking code
TB34S	TB34S
TB36S	TB36S
TB38S	TB38S
TB310S	TB310S
TB320S	TB320S

