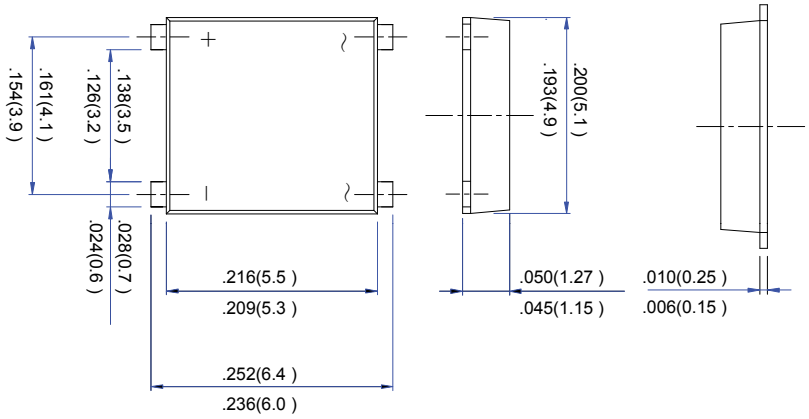
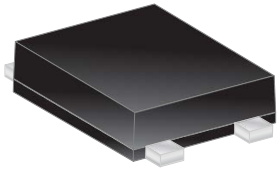
EBS101 thru EBS107

Glass Passivated Bridge Rectifier





Ordering Information	
Part Number	**Remark**
EBS10x-H	Halogen Free
EBS10x-Q	Automotive

PRIMARY CHARACTERISTICS	
I_F	1A
V_{RRM}	50~1000V
I_{FSM}	30A
V_F	1.1V
T_J max	150°C

EBS

Dimensions in inches and (millimeters)

Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper
- UL NO:E355733
- AEC-Q101 qualified

MECHANICAL DATA

- Polarity:Symbol molded on body
- Weight: 0.092 grams (approximate)

MAXIMUM RATINGS (TA=25°C unless otherwise noted)									
PARAMETER	**SYMBOL**	**EBS101**	**EBS102**	**EBS103**	**EBS104**	**EBS105**	**EBS106**	**EBS107**	**UNIT**
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output	I_F	1.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0							A
Non-repetitive peak forward surge current square waveform tp = 1 ms	I_{FSM}	50.0							A
Maximum Forward Voltage Drop Per Bridge Element at 1A Peak	V_F	1.1							V
Maximum DC Reverse Current @ T_J=25°C at Rated DC Blocking Voltage @ T_J=100°C	I_R	5 200							uA
Typical Junction Capacitance(NOTE1)	Cj	25.0							Pf
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	50.0							°C / W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

NOTES:

1.Thermal resistance junction to case

2.Device mounted on FR-4 substrate, 1"*1", 2oz, single-sided, PC boards with 0.1"*0.15" copper pad.

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FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

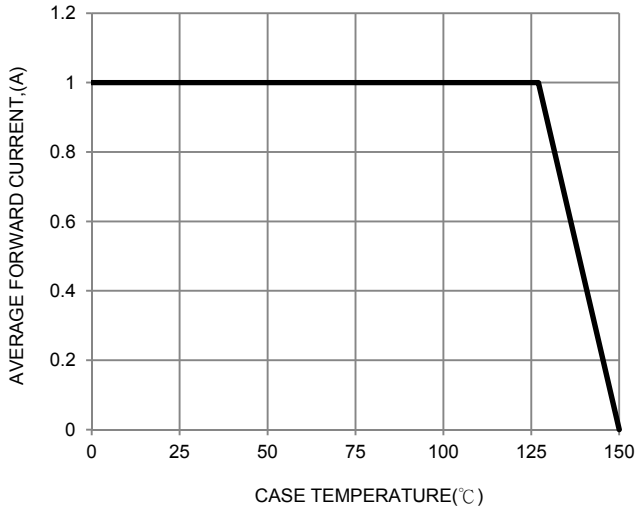

FIG. 2-TYPICAL FORWARD CHARACTERISTICS

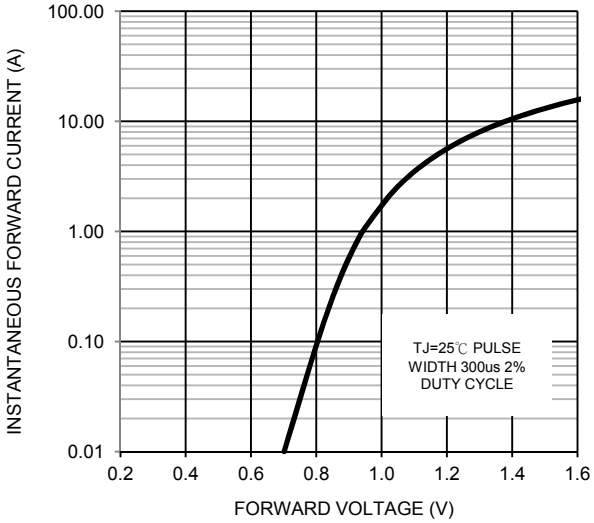

FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

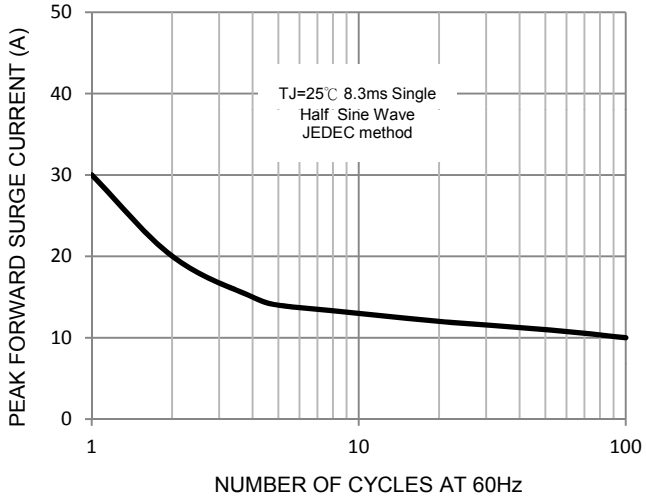

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

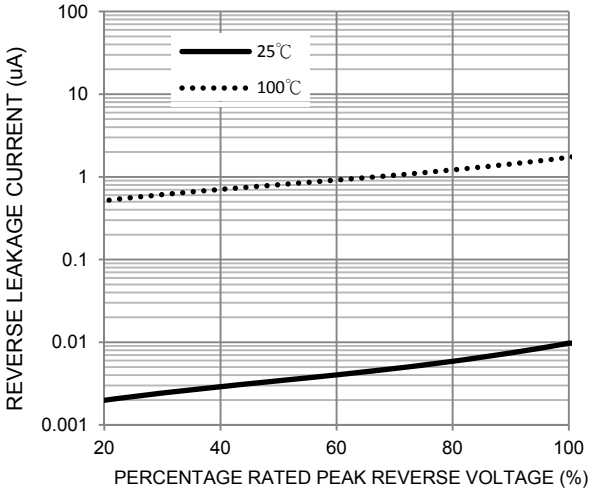

FIG. 5-TYPICAL JUNCTION CAPACITANCE