

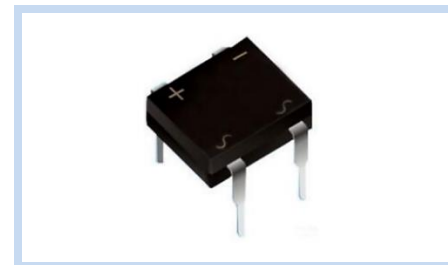
Single-Phase Bridge Rectifier 1.0A DIP Package

DB107-BP

MERITEK

FEATURE

- High Surge Overload Rating to 30A
- Glass Passivated Chip Junction
- Average Forward Rectified Output Current: 1.0A
- Repetitive Reverse Voltage: 1000V
- UL Safety Approved: Certification No: E223027



MECHANICAL DATA

- Case : DB, Epoxy Molded Meets UL94V-0
- Terminal: Leads Solderable per MIL-STD-202, Method 208

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

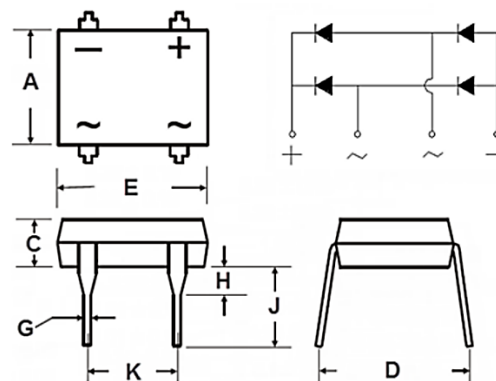
Parameter, T _A =25°C		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	1000	V
Maximum RMS Voltage		V _{RMS}	700	V
Maximum DC Blocking Voltage		V _{DC}	1000	V
Maximum Average Forward Rectified Current	T _A =40°C	I _{F(AV)}	1.0	A
Peak Forward Surge Current Single 8.3ms Half-Sine-Wave Superimposed on Rated Load		I _{FSM}	30	A
Reverse Leakage Current	T _A =25°C	I _R	5	μA
	T _A =125°C		500	
Maximum Forward Voltage	I _F =1.0A, T _A =25°C	V _F	1.1	V
Typical Junction Capacitance		C _J	25	pF
Typical Thermal Resistance	Junction to Ambient	R _{θJA}	40	°C/W
	Junction to Lead	R _{θJL}	15	°C/W
Operating Junction and Storage Temperature		T _J , T _{STG}	-55~150	°C

Note:

1. Typical Junction Capacitance measured at 1 MHz and applied reverse voltage of 4.0 V_{DC}
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads

DIMENSIONS

Item	Min (mm)	Max (mm)
A	6.20	6.50
C	2.60	3.10
D	7.60	8.90
E	8.12	8.51
G	0.50	
H	1.50	
J	3.90	4.20
K	5.00	5.20



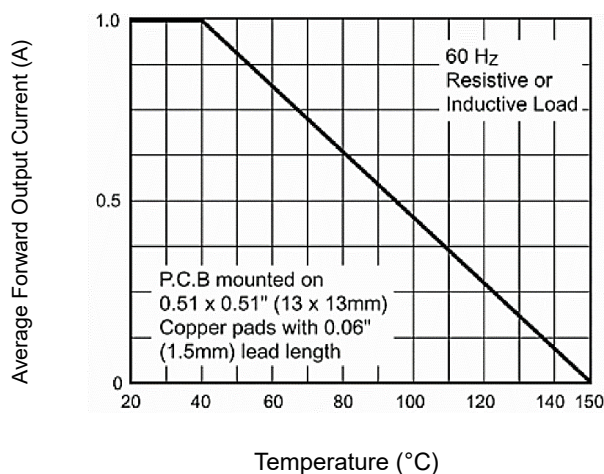
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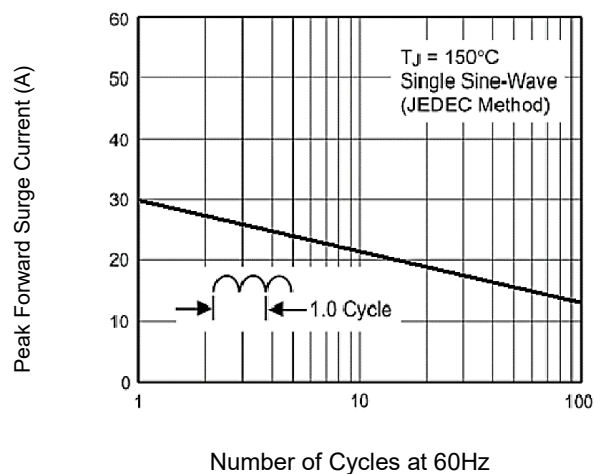
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CHARACTERISTIC CURVES

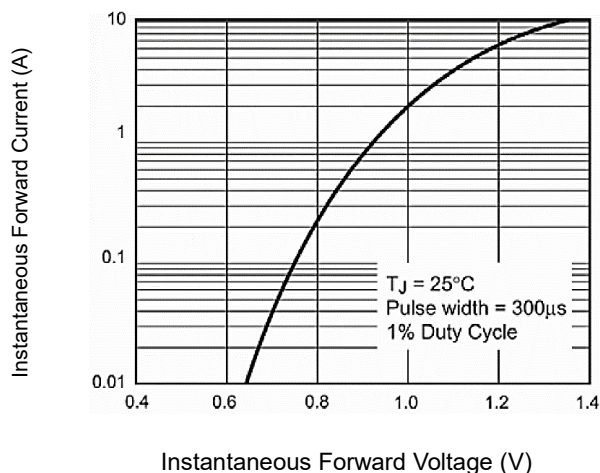
Derating Curve for Output Rectified Current



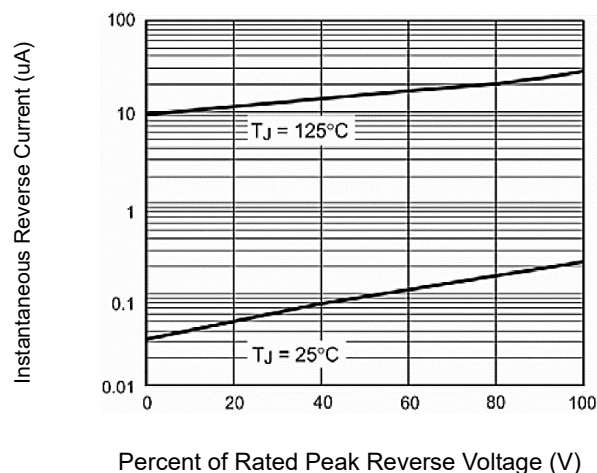
Maximum Non-Repetitive Peak Forward Surge Current



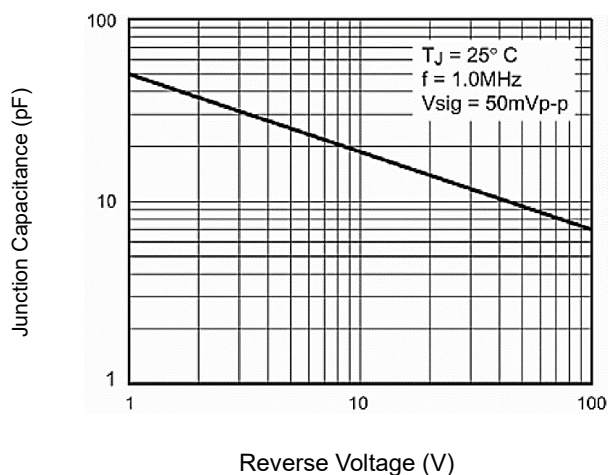
Typical Forward Characteristics



Typical Reverse Leakage Current Characteristics



Typical Junction Capacitance



Typical Transient Thermal Impedance

