

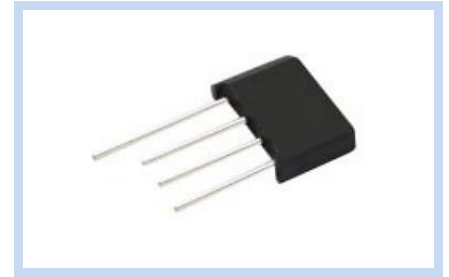
Single-Phase Bridge Rectifier 1.0A RS1 Package

RS1 Series

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FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 1.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 30A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

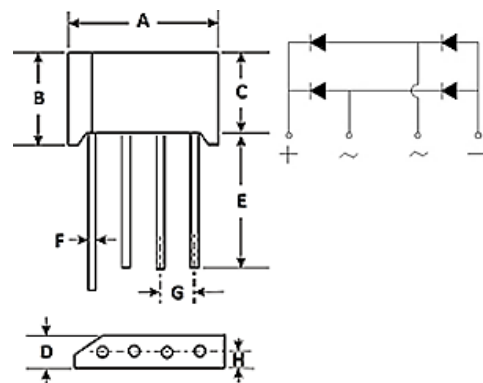


Parameter	Code	RS 101	RS 102	RS 103	RS 104	RS 105	RS 106	RS 107	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I_F	1.0, $T_A=50^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	10							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.0, $I_F=1.0\text{A}$							V
Typical Junction Capacitance per Element	C_J	24.0							pF
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I_R	10, $T_A=25^\circ\text{C}$							μA
	I_R	500, $T_A=100^\circ\text{C}$							μA
Operating Junction and Storage Temperature	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	50							$^\circ\text{C/W}$

- Note:
1. Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz. For Capacitive load derate current by 20%.
 2. Thermal resistance from Junction to Ambient on P.C. board mounting.
 3. Measured at 2.0MHz and applied reverse voltage of 4.0 volts.

DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)
A	15.50	16.50
B	9.50	10.50
C	8.10	9.10
D	3.60	4.10
E	9.90	-
F	0.70	0.90
G	3.60	4.10
H	1.27	



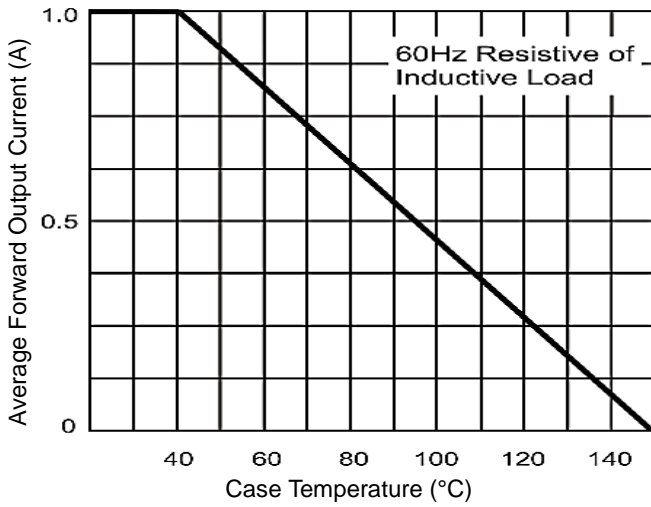
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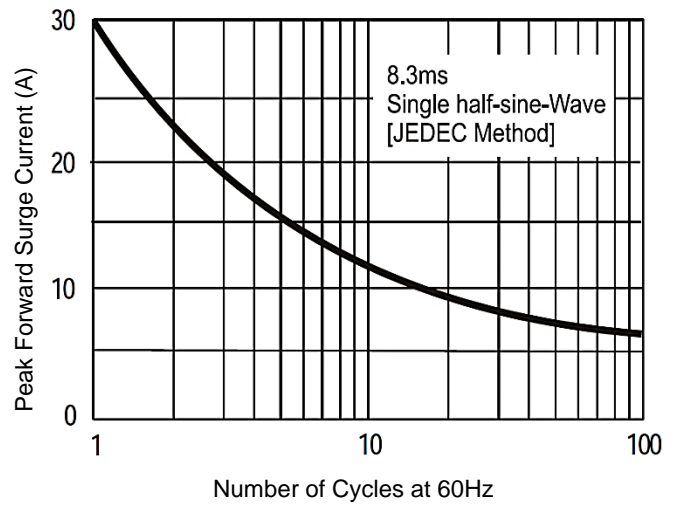
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RATING AND CHARACTERISTIC CURVES

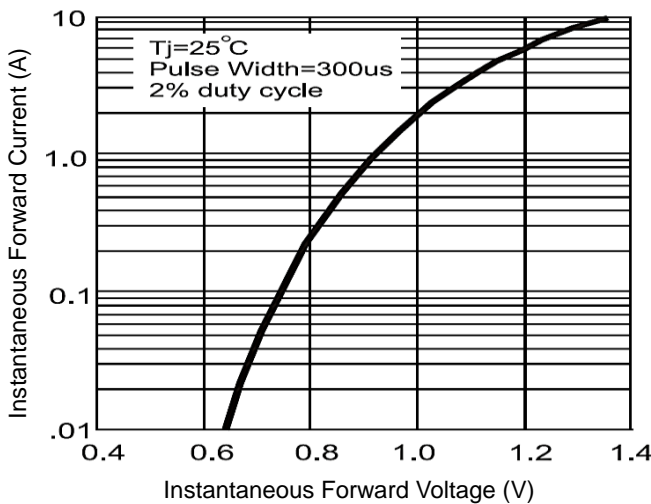
Derating Curve for Output Rectified Current



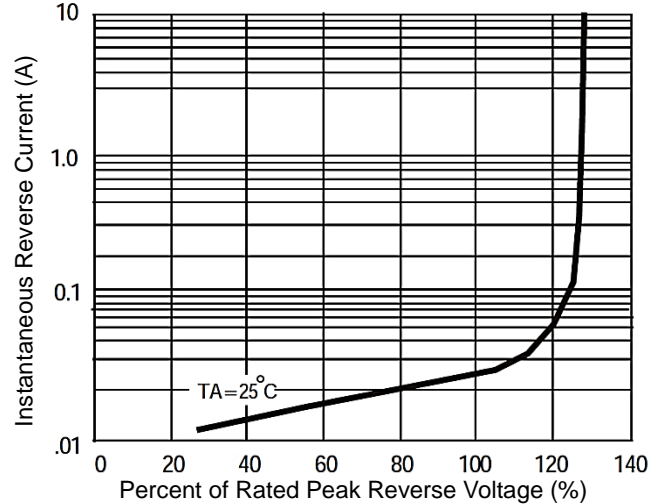
Maximum Non-Repetitive Peak Forward Surge Current



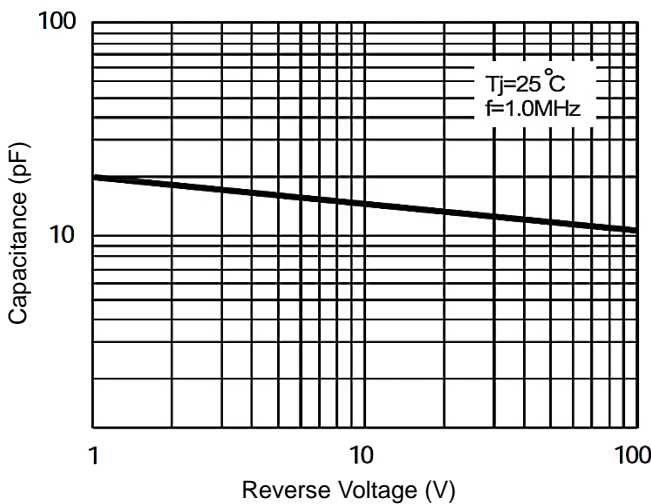
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics at Tj=25°C



Typical Junction Capacitance



*Specifications subject to change without notice.