

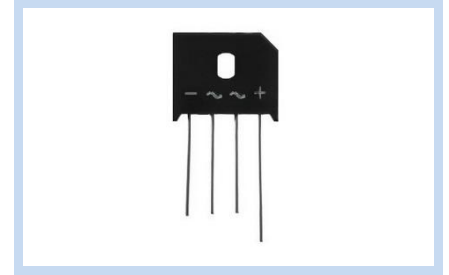
Single-Phase Bridge Rectifier 10.0A KBU Package

RS10005~RS1010

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FEATURE

- Operating Temperature: -55 ~ +150°C
- Average Forward Rectified Output Current 10.0A
- Repetitive Reverse Voltage from 50~1000V
- Surge Overload Ratings to 300A
- Flammability Classification 94V-0
- UL Safety Approved: Certification No: E223027



MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

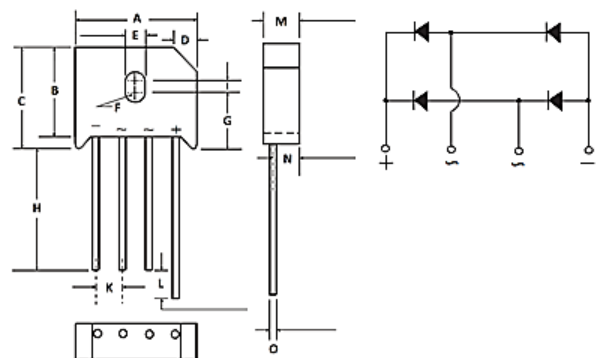


Parameter	Code	RS 10005	RS 1001	RS 1002	RS 1004	RS 1006	RS 1008	RS 1010	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current	I_F	10, $T_C=100^\circ\text{C}$							A
Peak Forward Surge Current Single Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	300							A
Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	373							A^2sec
Maximum Instantaneous Forward Voltage Drop per Diode	V_F	1.1, $I_F=10.0\text{A}$							V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element	I_R	10, $T_A=25^\circ\text{C}$							μA
	I_R	1000, $T_A=125^\circ\text{C}$							μA
Operating Junction and Storage Temperature	T_J, T_{STG}	-55~150							$^\circ\text{C}$
Typical Thermal Resistance per Element	$R_{\theta JA}$	4.5							$^\circ\text{C/W}$

- 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.

DIMENSION AND PIN CONFIGURATION

Item	Min. (mm)	Max. (mm)	Item	Min. (mm)	Max. (mm)
A	22.70	23.70	H	25.40	-
B	16.80	17.80	I	1.70	2.20
C	-	19.30	K	4.60	5.60
D	4.20	4.60	L	5.10	6.10
E	3.60	4.10	M	6.60	7.00
F	1.90 TYP. (2 Places)		N	4.70	5.10
G	10.30	11.30	O	1.20	1.30



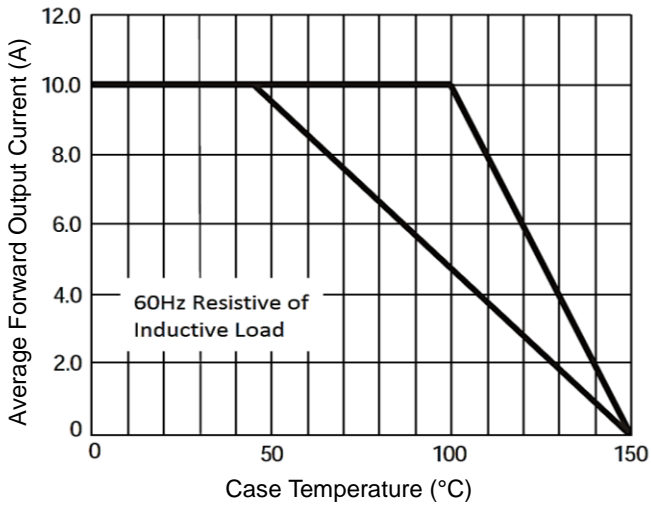
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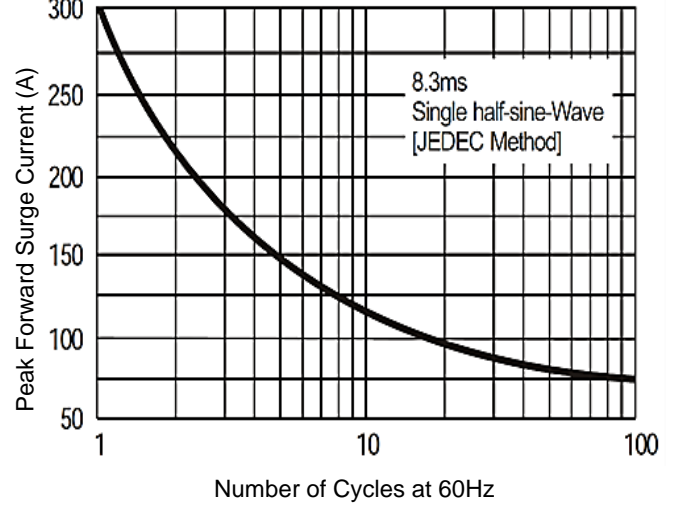
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RATING AND CHARACTERISTIC CURVES

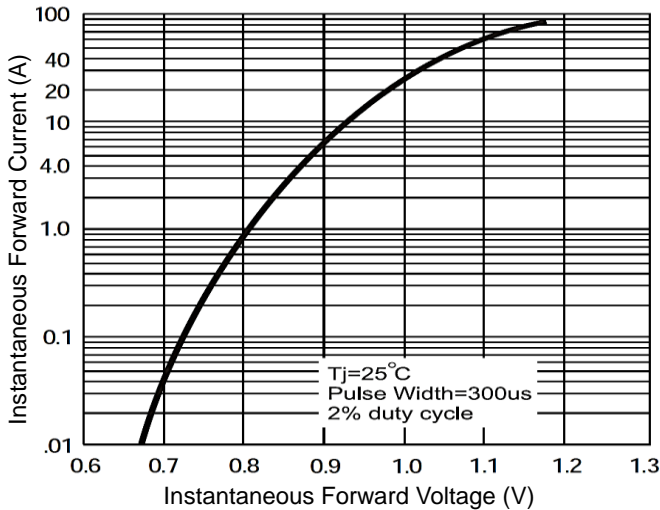
Derating Curve for Output Rectified Current



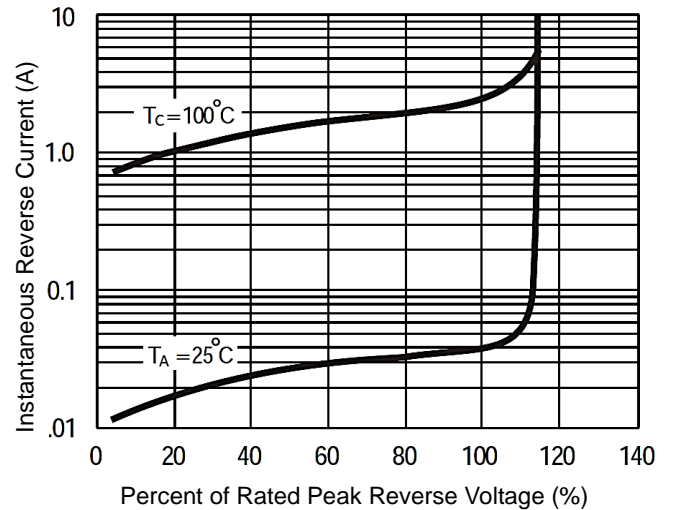
Maximum Non-Repetitive Peak Forward Surge Current



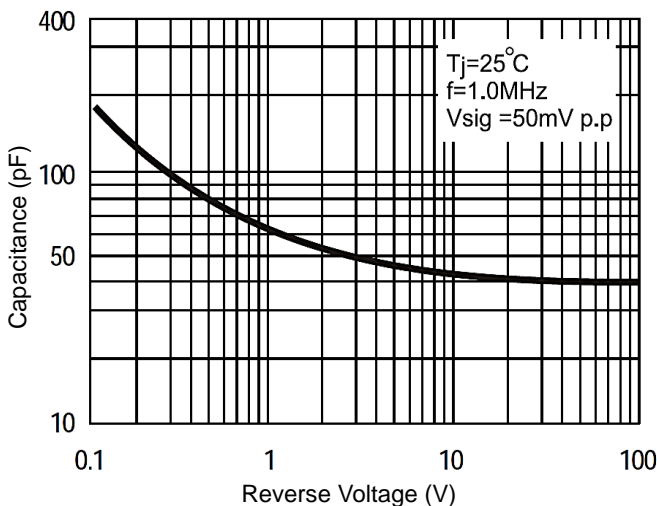
Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics at $T_j=25^\circ\text{C}$



Typical Junction Capacitance



*Specifications subject to change without notice.