

Single Phase Silicon Bridge Rectifier

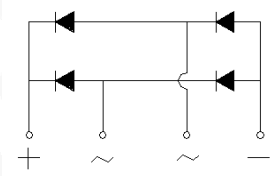
$V_{RRM} = 600\text{ V} - 1000\text{ V}$
 $I_O = 10\text{ A}$

Features

- Low forward voltage drop
- Low leakage current
- Types from 600 V up to 1000 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

Case: Molded plastic body
 Polarity: marked on the body
 Mounting: Hole thru for #6 screw
 Mounting position: Any



BR-10 Package



Maximum ratings at $T_c = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	BR106	BR108	BR1010	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RMS}		420	560	700	V
DC blocking voltage	V_{DC}		600	800	1000	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	$^{\circ}\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	$^{\circ}\text{C}$

Electrical characteristics at $T_c = 25\text{ }^{\circ}\text{C}$, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load
 For capacitive load derate current by 20%

Parameter	Symbol	Conditions	BR106	BR108	BR1010	Unit
Maximum average forward rectified current	I_O	$T_c = 50\text{ }^{\circ}\text{C}$	10	10	10	A
Peak forward surge current	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	150	150	150	A
Maximum instantaneous forward voltage drop per bridge element	V_F	$I_F = 5.0\text{ A}$	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_a = 25\text{ }^{\circ}\text{C}$ $T_a = 100\text{ }^{\circ}\text{C}$	10 1000	10 1000	10 1000	μA
Typical junction capacitance	C_j		55	55	55	pF
Typical thermal resistance	$R_{\theta JA}$		9.4	9.4	9.4	$^{\circ}\text{C/W}$

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

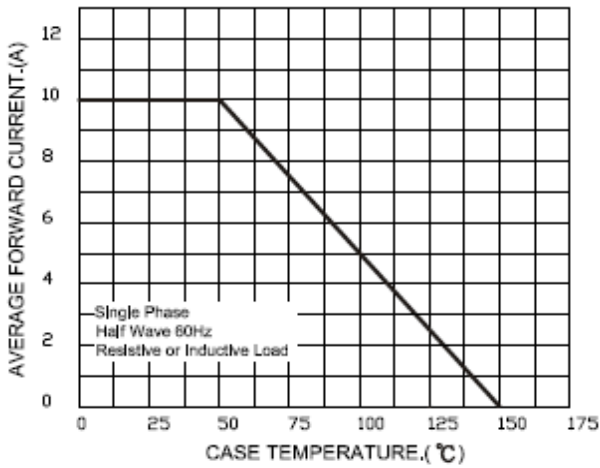


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

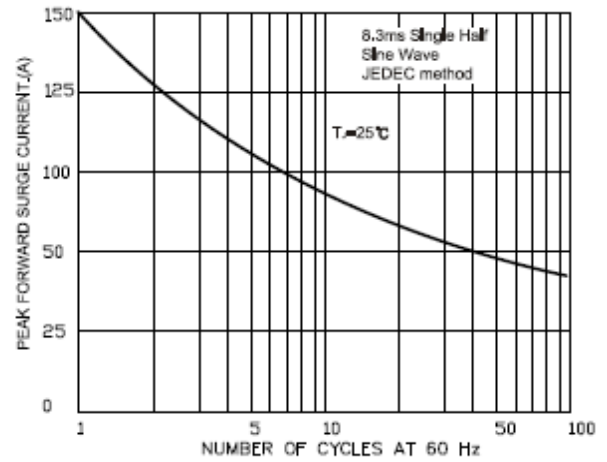


FIG.3-TYPICAL FORWARD CHARACTERISTICS

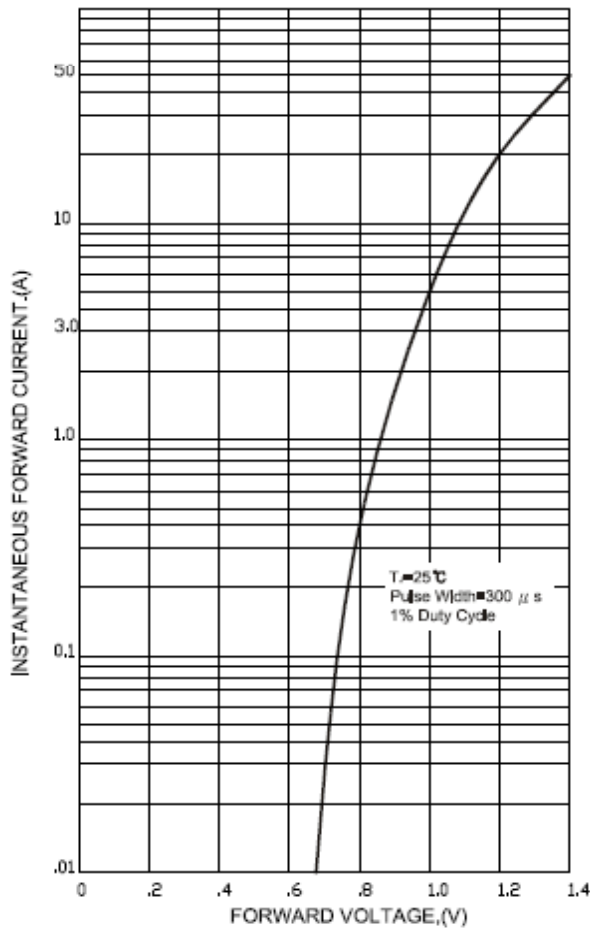
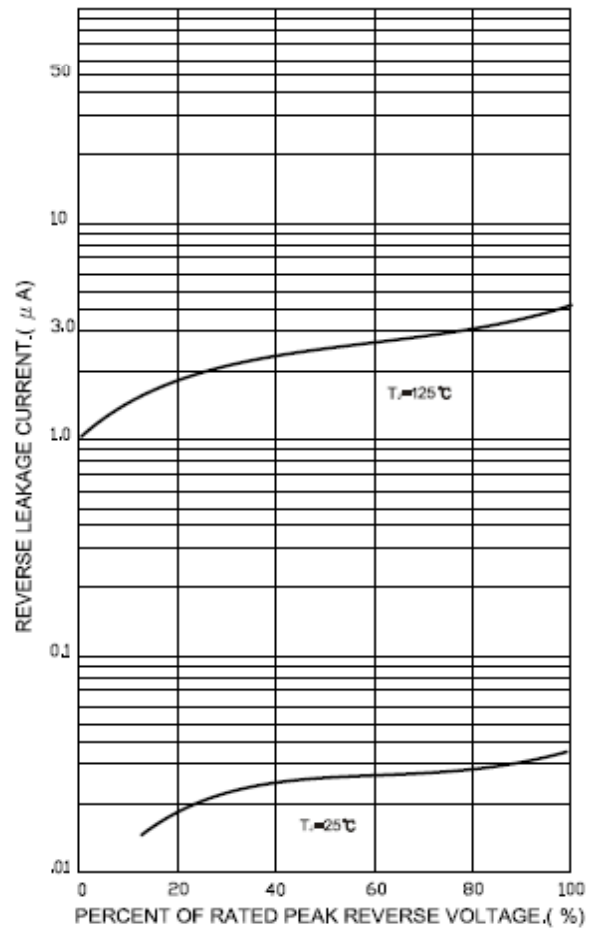


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

