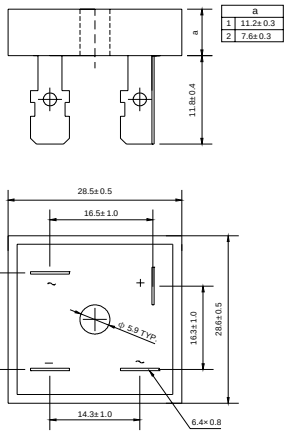
KBPC5012

Silicon Bridge Rectifiers

VOLTAGE RANGE: 1200 V
CURRENT: 50.0 A

KBPC



Dimensions in millimeters

Features

- ◇ Rating to 1200V PRV
- ◇ Surge overload rating to 500 Amperes
- ◇ peak Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

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

		KBPC5012	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	1200	V
Maximum RMS voltage	V_{RMS}	840	V
Maximum DC blocking voltage	V_{DC}	1200	V
Maximum average forw ard Output current @T_A=25℃	$I_{F(AV)}$	50.0	A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load	I_{FSM}	500.0	A
I²t Rating for fusing @Tj=25℃	I²t	1250	A²S
Maximum instantaneous forw ard voltage @ 25 A	V_F	1.1	V
Maximum reverse current @T_A=25℃	I_R	5.0	μA
at rated DC blocking voltage @T_A=100℃		3.0	mA
Typical thermal resistance per leg	$R_{\Theta JC}$	1.6	°C/W
Operating junction temperature range	T_J	- 55 ---- + 150	℃
Storage temperature range	T_{STG}	- 55 ---- + 150	℃

KBPC5012

Silicon Bridge Rectifiers

Ratings AND Charactieristic Curves

FIG1:Io-Tc Curve

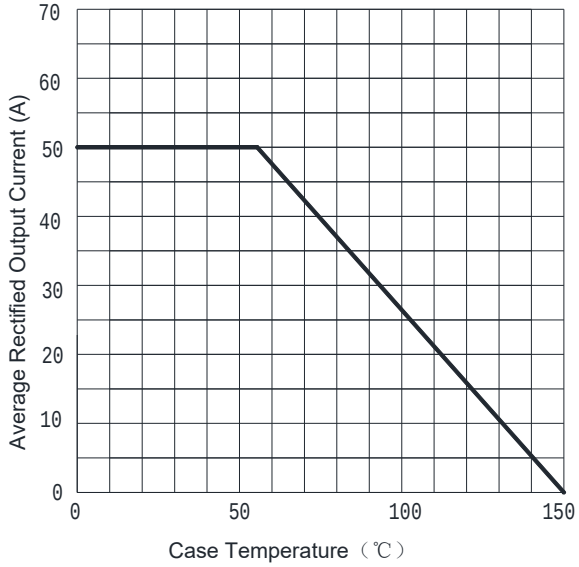


FIG2:Surge Forward Current Capability

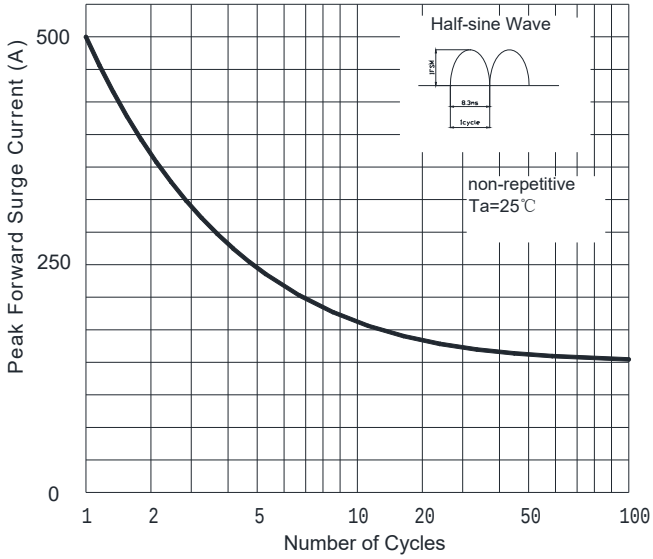


FIG3:Instantaneous Forward Voltage

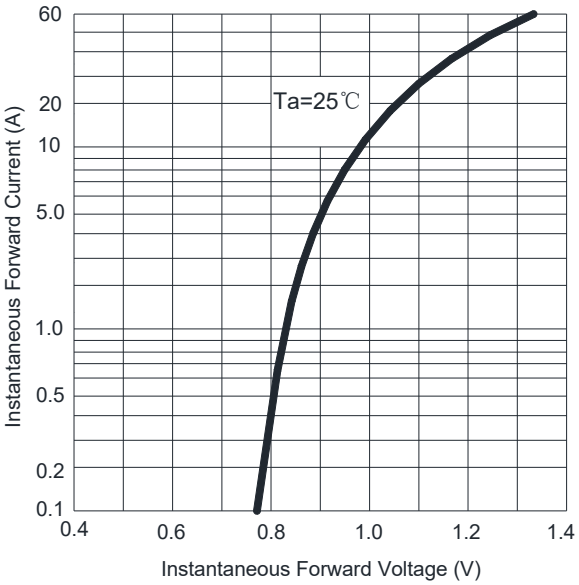


FIG4:Typical Reverse Characteristics