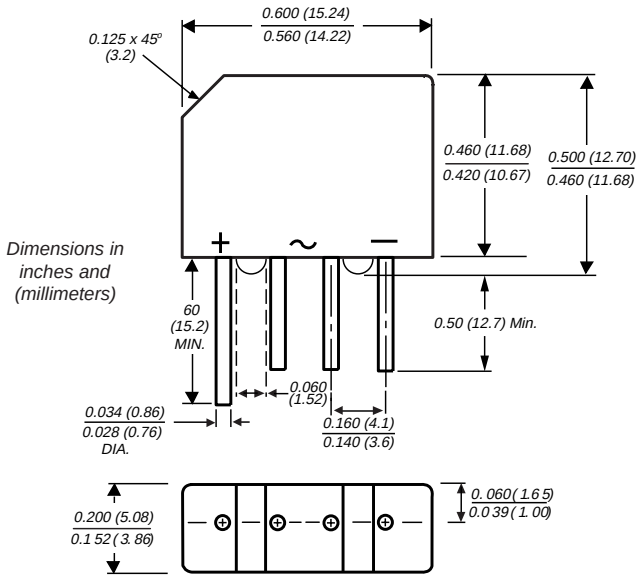
Case KBP

Glass Passivated Single Phase Bridge Rectifiers



Reverse Voltage 200 to 1000V
Forward current 1.5 Amp

Features

- Glass passivated die construction
- Ideal for printed circuit boards
- Plastic material used carries UL flammability recognition 94V-0
- High surge current capability
- High case dielectric strength of 1500 V_{RMS}
- High temperature soldering guaranteed: 265°C /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

SMSC Catalog Number	Maximum Repetitive Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
KBP02G	200V	140V	200V
KBP04G	400V	280V	400V
KBP06G	600V	420V	600V
KBP08G	800V	560V	800V
KBP10G	1000V	700V	1000V

Mechanical Data

Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any
Weight: 0.06 oz., 1.7 g

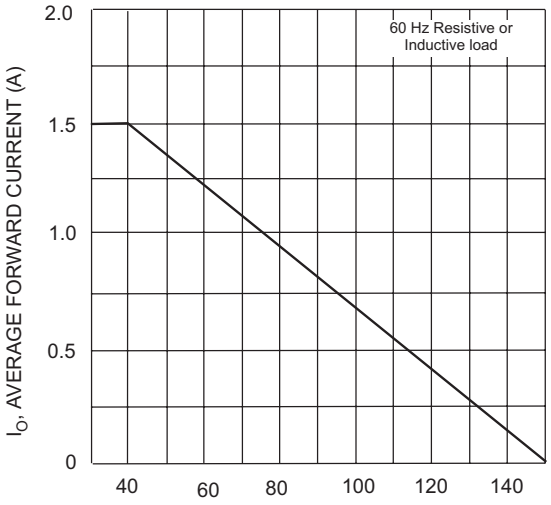
Maximum Ratings and Thermal Characteristics (TA = 25°C unless otherwise noted)

Maximum average forward output rectified current Tc = 40°C	$I_{F(AV)}$	1.5	A
Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50	A
Rating for fusing (t<8.3ms)	I^2t	10	A^2sec
Maximum thermal resistance per leg(1)	$R_{\theta JA}$ $R_{\theta JC}$	40 13	°C/W
Operating Junction and storage temperature range	Tj, T_{STG}	-55 to +150	°C

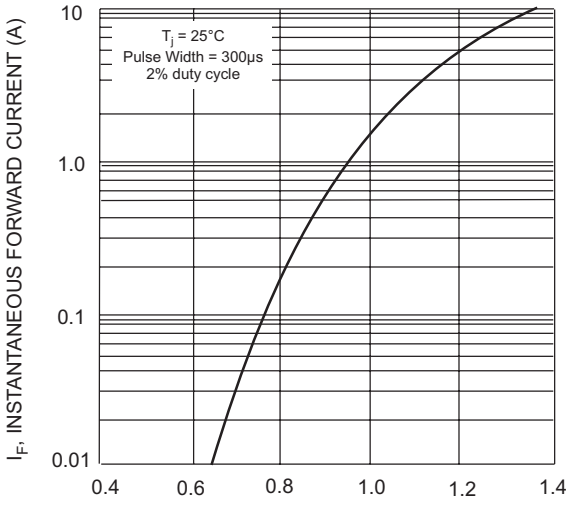
Electrical Characteristics (TA = 25°C unless otherwise noted)

Maximum Instantaneous Forward Voltage per leg	V_F	1.0V	I_{FM} =1.5A
Maximum DC reverse current at rated DC blocking voltage per leg	I_R	5.0μA 500μA	T_A = 25°C T_A = 125°C

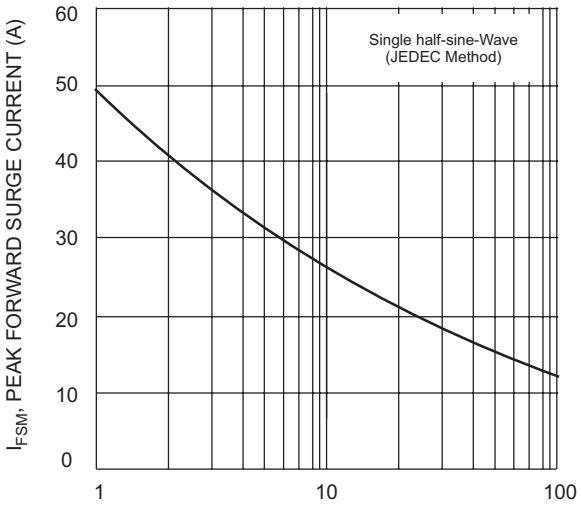
Notes: (1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.47 x 0.47" (12 x 12mm) copper pads.



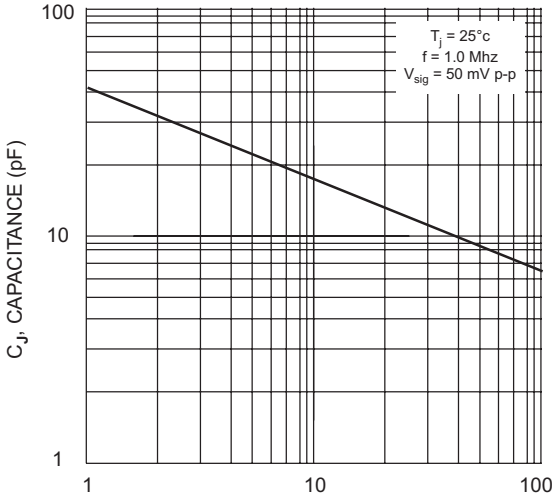
T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Output Current Derating Curve



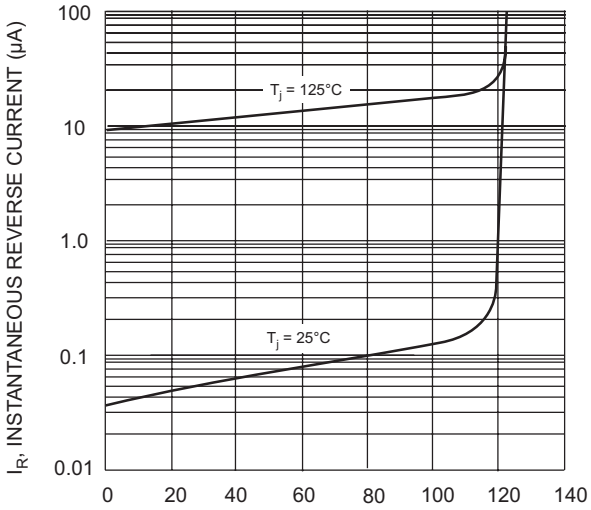
V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typ Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Forward Surge Current



V_R, REVERSE VOLTAGE (V)
Fig. 4 Typ Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typ Reverse Characteristics (per element)