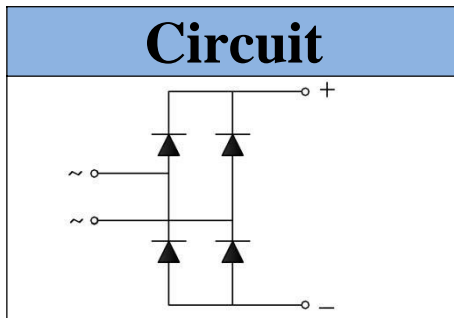**LJ ELECTRONIC**

Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V
Forward Current 25 Amp

Features
- Glass passivated die construction
- Ideal for printed circuit boards
- High surge current capability
- High temperature soldering guaranteed: 265℃ /10 seconds, 0.375" (9.5mm) lead length, 5lbs. (2.3kg) tension

Circuit

Mechanical Data
Case: Molded plastic case
Terminals: Plated leads solderable per MIL-STD-750, Method 2026
Polarity: Marked on Body
Mounting Position: Any

Bridge Type

TYPE	V_{RRM}	V_{RSM}
KBPC 2502	200V	300V
KBPC 2504	400V	500V
KBPC 2506	600V	700V
KBPC 2508	800V	900V
KBPC 2510	1000V	1100V

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

Symbol	Conditions	Values	Units
$I_{(AV)}$	Maximum average forward output rectified current Tc =55℃	25	A
I_{FSM}	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	350	A
I^2t	Rating for fusing (t<10ms)	612	A^2s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
$R_{\theta JC}$	Maximum thermal resistance per leg (1)	2.2	℃/W
TOR	Mounting Torque (Recommended torque:2 N.m)	2	N.m
T_j, T_{STG}	Operating Junction and storage temperature range	-55 to +150	℃
Weight	Approximate Weight	18	g

Electrical Characteristics (TA = 25℃ unless otherwise noted)

Symbol	Conditions		Values	Units
V_F	Maximum Instantaneous Forward Voltage per leg I_{FM} =12.5A		1.1	V
I_R	Maximum DC reverse current at rated DC blocking voltage per leg	T_A = 25℃ T_A = 125℃	5.0 500	µA

Notes: (1) Junction to case with heatsink
(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw
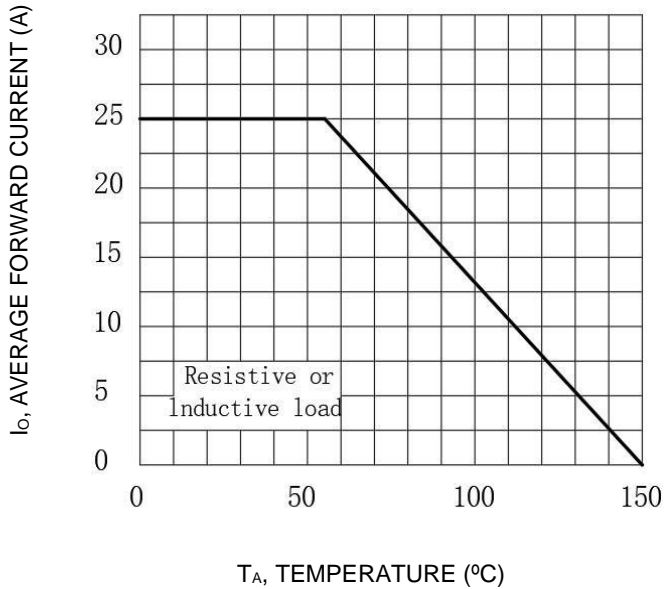
Performance Curves

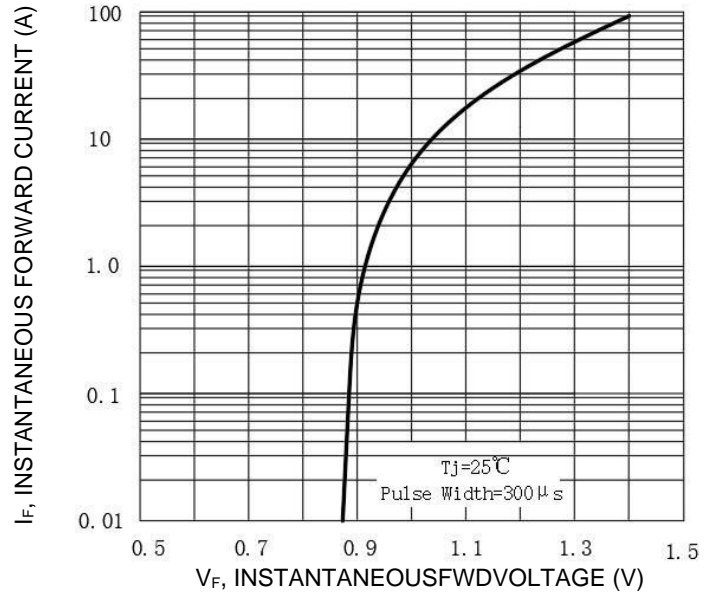Fig.1 Forward Current Derating Curve

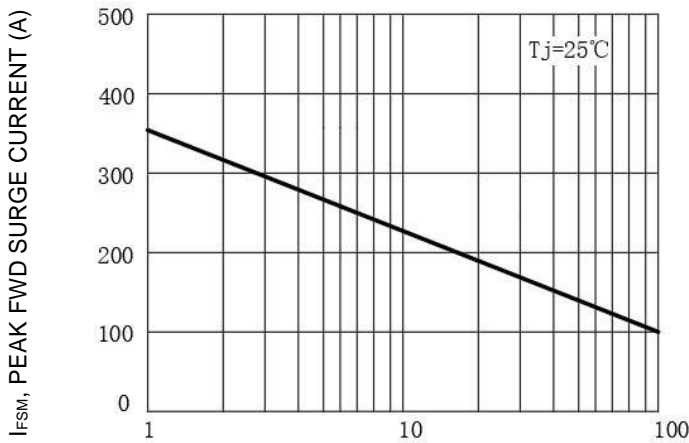Fig.2 Typical Forward Characteristics, per element
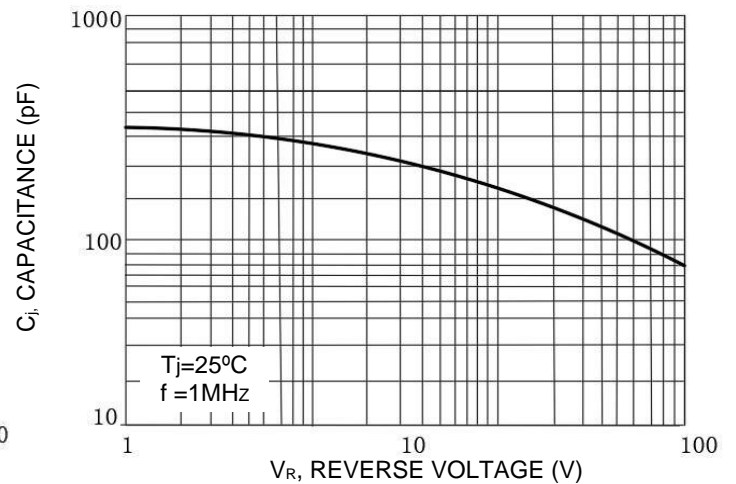

Fig.3 Max Non-Repetitive Surge Current

Fig.4 Typical Junction Capacitance per Element

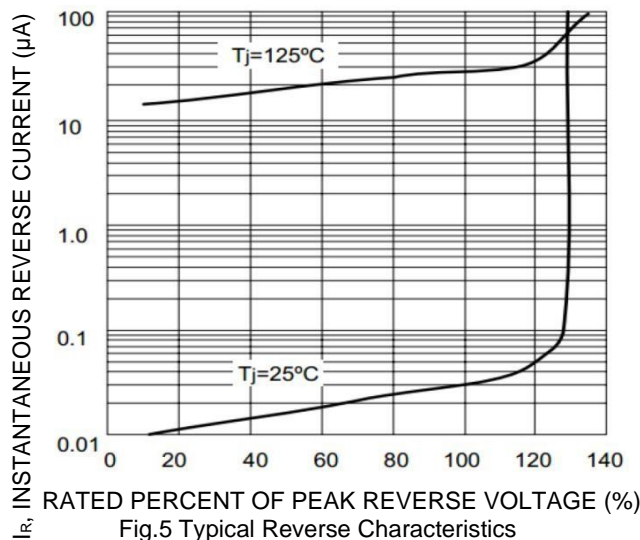Fig.5 Typical Reverse Characteristics

![KBPC2506 thru KBPC2510 logo: L.J ELECTRONIC]

KBPC2506 thru KBPC2510

Package Outline Information

CASE: KBPC

Dimensions in inches (mm)

dimensions: 0.8±0.05, 6.4±0.1, 23±0.5, 11±0.2, ⌀5+0.3, 18.1±1, 28.5±0.5, 14.2±1, 16.4±1, 16.4±1, 28.5±0.5