

Glass Passivated Single Phase Bridge Rectifiers

Reverse Voltage 200 to 1000V Forward Current 35 Amp

Features

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

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	VRRM	Vrsm		
KBPC 3502	200V	300V		
KBPC 3504	400V	500V		
KBPC 3506	600V	700V		
KBPC 3508	800V	900V		
KBPC 3510	1000V	1100V		

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

Symbol	Conditions	Values	Units
I(AV)	Maximum average forward output rectified current Tc =55 $^{\circ}$ C	35	Α
IFSM	Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method)	400	А
l ² t	Rating for fusing (t<10ms)	800	A ² s
Visol	a.c.50HZ;r.m.s.;1min	2500	V
Rejc	Maximum thermal resistance per leg (1)	1.6	°C/W
TOR	Mounting Torque (Recommended torque:0.5 N.m)	2	N.m
Тj, Tsтg	Operating Junction and storage temperature range	-55 to +150	$^{\circ}$
Weight	Approximate Weight	18	g

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

Symbol	Conditions	Values	Units
VF	Maximum Instantaneous Forward Voltage per leg IFM =17.5A	1.1	V
lR	Maximum DC reverse current at rated $T_A = 25^{\circ}C$ DC blocking voltage per leg $T_A = 125^{\circ}C$	5.0 500	μΑ

Notes: (1) Junction to case with heatsink

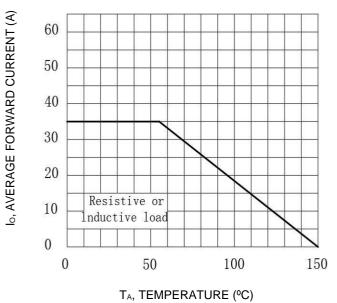
(2) Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw

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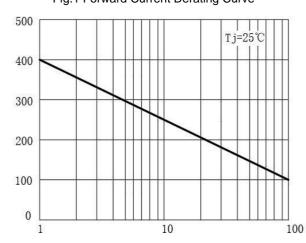
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Performance Curves







NUMBER OF CYCLES AT 50Hz Fig.3 Max Non-Repetitive Surge Current

0.1

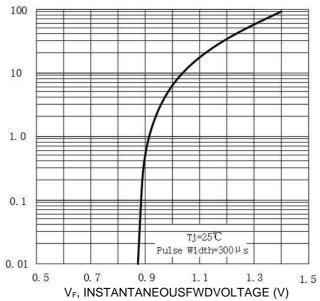
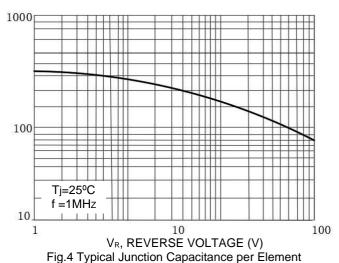


Fig.2 Typical Forward Characteristics, per element



100 Ti=125°C 10 1.0

INSTANTANEOUS REVERSE CURRENT (µA) =25°C 0.01 20 40 60 80 100 120 140 RATED PERCENT OF PEAK REVERSE VOLTAGE (%) Fig.5 Typical Reverse Characteristics

IF, INSTANTANEOUS FORWARD CURRENT (A)

Cj, CAPACITANCE (pF)

IFSM, PEAK FWD SURGE CURRENT (A)



Package Outline Information

