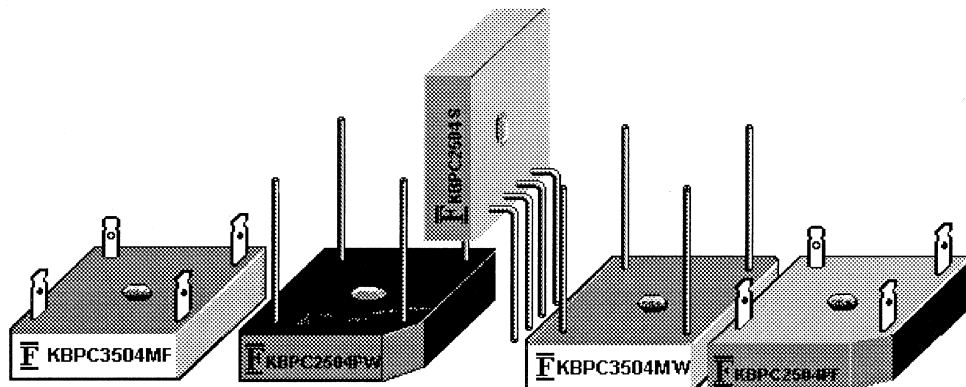


### Description

## Mechanical Dimensions

***KBPC4000~4010***

**KBPC-PF**

### Dimensions in mm

Feature	Mechanical Data
■ Surge overload 400A	■ Case: Molded plastic body over passivated junctions
■ Low forward voltage drop	■ Polarity: Polarity symbols molded on body
■ Mounting Position: Any	■ Terminals: Lead Solderable per MIL-STD-750
■ Electrically isolated base-2000Volts	Method 2026
■ Solderable 0.25" Faston Terminals	■ MountingTorque: 5 in-lbs max
■ Materials used carries U/L recognition	■ Weight: 19.5 grams(Faston); 14.5grams(Wire Lead)

**Max Ratings at Ta=25C Unless Otherwise Specified**

Characteristic	Symbol	KBPC4000~4010							Unit
		4000	4001	4002	4004	4006	4008	4010	
Peak Repetitive Reverse Voltage	Vrrm	50	100	200	400	600	800	1000	V
working Peak Reverse Voltage	Vrwm	35	70	140	280	420	560	700	V
DC Blocking Voltage	Vdc	50	100	200	400	600	800	1000	V
Forward Continuous Current	IF(AV)	40							V
Peak Forward Surge Current 10ms Sine pulse, rated Vrrm applied	IFSM	400							A
Max Forward Voltage IF=20A @25C	Vf	1.0							V
Reverse Leakage Current WITH Vr @ 25C/125C	Ir	5.0/500							uA
Operating & Storage Temp. Range	Tj/Ts	-40 ~+125							C
Thermal Resistance Junction to Case	Rthja	2.6							C/W
Thermal Resistance Case to Heatsink	Rthjc	2.3							C/W
Rating for fusing(t<8.3ms)	I <sup>2</sup> t	374							C/W



Data Sheet

## 40 Amps Plastic case Silicon Bridge Rectifiers

Rating Characteristic Curves KBPC4000~4010(Ta=25C Unless otherwise noted)

FIG.1-MAXIMUM FORWARD SURGE CURRENT

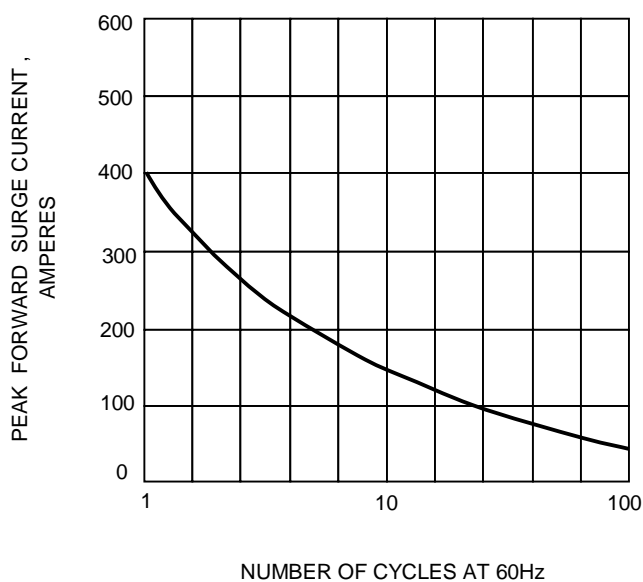


FIG.2- DERATING CURVE OUTPUT  
RECTIFIED CURRENT

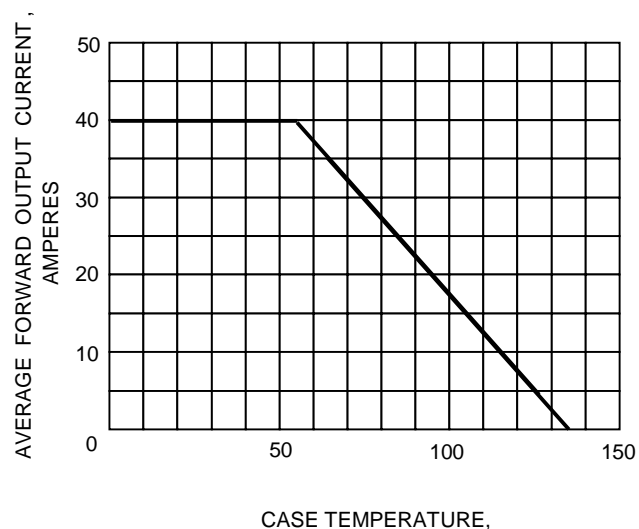


FIG.3-TYPICAL FORWARD CHARACTERISTICS

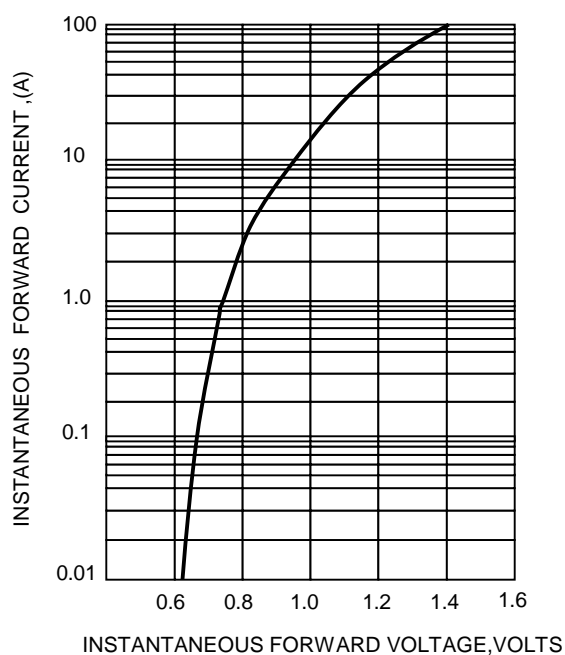
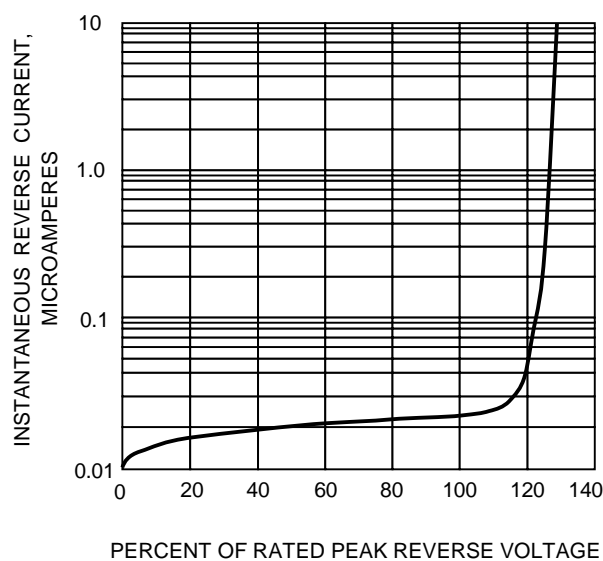
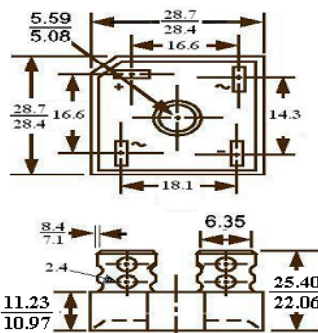


FIG.4-TYPICAL REVERSE CHARACTERISTICS

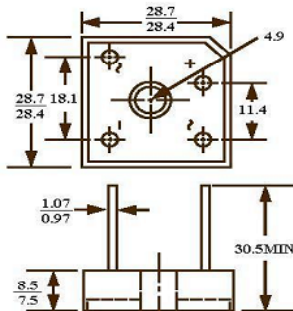




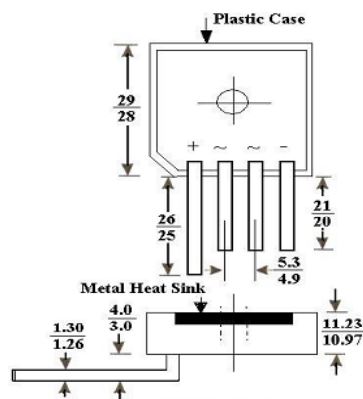
# 40 Amps Plastic case Silicon Bridge Rectifiers



Plastic Case  
Fastons Terminals

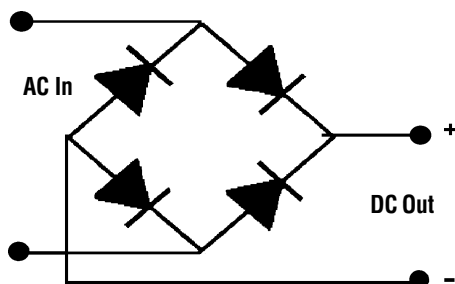


Plastic Case  
Wire Leads Terminals



Plastic Case S type  
Wire Leads Terminals

KBPC4000~4010



Case - Metal or Molded Plastic

Terminals - Plated .25" Faston or Plated Copper Wire Leads .040" Diameter

Weight - 0.706 Ounces, 20 Grams

Mounting Position - Any with Bolt Down with Silicone Thermal Compound Between Bridge and Mounting Surface for Optimum Heat Transfer

Transfer

Mounting Torque - 20 Inch Pound Max

## Ordering Information

FCI'S KBPC Series of Bridges Can Be Ordered with Options on Terminals and Case Materials.

### How To Specify Case Material and Terminal Options:

- For Metal Case, Order Suffix (1) "M"
- For Plastic Case, Order Suffix (1) "P"
- For Faston Terminals, Order Suffix (2) "F"
- For Wire Lead Terminals, Order Suffix (2) "W"

## KBPC Series Examples

To Order a 25 Amp, 400 Volt Bridge with Faston Leads and a Plastic Case:

Specify - **KBPC2504PF** . . . Where "P" = Plastic and "F" = Faston Terminals

To Order a 35 Amp, 800 Volt Bridge with Wire Leads and a Metal Case:

Specify - **KBPC3508MW** . . . Where "M" = Metal and "W" = Wire Leads (Terminals)

To Order a 15 Amp, 200 Volt, UL Recognized Bridge with Wire Leads and a Plastic Case:

Specify - **KBPC1502PWU** . . . Where "P" = Plastic and "W" = Wire Leads (Terminals) and "U" = UL Recognized

**NOTE:** Fast Recovery Bridges (Diodes) Are Available; Please Contact FCI Components.

## KBPC - "S" Series Examples

To Order Bridges with the "In-Line" Pin Configuration, Select the Current and Voltage Desired and Add "S" as the Suffix, as shown in the following example.

To Order a 35 Amp, 800 Volt Bridge with In-Line Wire Leads:

Specify - **KBPC3508S** . . . Where "S" = In-Line Wire Lead Terminals