

# Bridge Rectifier

## **2KBP10M**

1000V / 2A

# DATASHEET

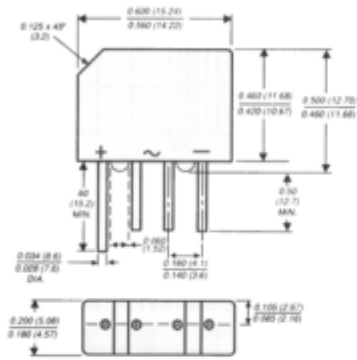
OEM – General Semiconductor

Source: General Semiconductor Databook 1998

# 2KBP005M THRU 2KBP10M SERIES 3N253 THRU 3N259

**GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER**  
Reverse Voltage - 50 to 1000 Volts    Forward Current - 2.0 Amperes

**Case Style KBPM**



Polarity shown on front side of case: positive lead by beveled corner

Dimensions in inches and (millimeters)

**FEATURES**

- ◆ Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- ◆ This series is UL listed under the Recognized Component Index, file number E54214
- ◆ Glass passivated chip junctions
- ◆ Typical  $I_R$  less than 0.1  $\mu$ A
- ◆ High case dielectric strength
- ◆ Ideal for printed circuit boards
- ◆ High temperature soldering guaranteed:  
260°C/10 seconds at 5 lbs. (2.3kg) tension



**MECHANICAL DATA**

**Case:** Molded plastic body over passivated junctions  
**Terminals:** Plated leads solderable per MIL-STD-750, Method 2026  
**Mounting Position:** Any  
**Weight:** 0.06 ounce, 1.7 grams

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	2KBP 005M 3N253	2KBP 01M 3N254	2KBP 02M 3N255	2KBP 04M 3N256	2KBP 06M 3N257	2KBP 08M 3N258	2KBP 10M 3N259	UNITS
* Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
* Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
* Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
* Maximum average forward output rectified current at TA=55°C	IAV	2.0							Amps
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) TJ=150°C	IFSM	60.0							Amps
Rating for fusing (t < 8.3ms)	It	15.0							A²sec
* Maximum instantaneous forward voltage drop per leg at 3.14A	VF	1.1							Volts
* Maximum DC reverse current at rated DC blocking voltage per leg	IR	5.0 500.0							$\mu$ A
Typical junction capacitance per leg (NOTE 1)	CJ	25.0							pF
Typical thermal resistance per leg (NOTE 2)	REJA REJL	30.0 11.0							°C/W
* Operating junction and storage temperature range	TJ, TSTG	-55 to +165							°C

**NOTES:**

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts

(2) 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

\* JEDEC registered values

**RATINGS AND CHARACTERISTICS CURVES 3N253 THRU 3N259 / 2KBP005M THRU 2KBP10M**

