

# Bridge Rectifier

## **3N257**

600V / 2A

# DATASHEET

from

[www.web-bcs.com](http://www.web-bcs.com)

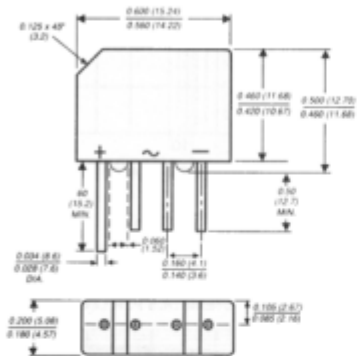
OEM – General Semiconductor

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**

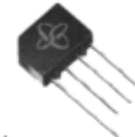


*Polarity shown on front side of case: positive lead by beveled corner*

*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	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
* Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
* Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
* Maximum average forward output rectified current at T <sub>A</sub> =55°C	I <sub(av)< sub=""></sub(av)<>	2.0							Amps
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T <sub>J</sub> =150°C	I <sub>FSM</sub>	60.0							Amps
Rating for fusing (t < 8.3ms)	I <sub>t</sub>	15.0							A <sup>2</sup> sec
* Maximum instantaneous forward voltage drop per leg at 3.14A	V <sub>F</sub>	1.1							Volts
* Maximum DC reverse current at rated DC blocking voltage per leg	I <sub>R</sub>	5.0 500.0							$\mu$ A
Typical junction capacitance per leg (NOTE 1)	C <sub>J</sub>	25.0							pF
Typical thermal resistance per leg (NOTE 2)	R <sub>θJA</sub> R <sub>θJL</sub>	30.0 11.0							°C/W
* Operating junction and storage temperature range	T <sub>J</sub> , T <sub>STG</sub>	-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**

