

Bridge Rectifier

2KBP005M

50V / 2A

DATASHEET

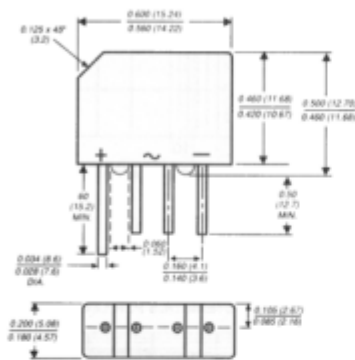
OEM – General Semiconductor

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

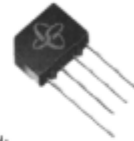


Polarity shown on front side of case: positive lead by beveled corner

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 0.1μA
- ◆ 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 _{RRM}	50	100	200	400	600	800	1000	Volts
* Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
* Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
* Maximum average forward output rectified current at T _A =55°C	I _(AV)	2.0							Amps
* Peak forward surge current single half sine-wave superimposed on rated load (JEDEC Method) T _J =150°C	I _{FSM}	60.0							Amps
Rating for fusing (t < 8.3ms)	I _t	15.0							A ² sec
* Maximum instantaneous forward voltage drop per leg at 3.14A	V _F	1.1							Volts
* Maximum DC reverse current at rated DC blocking voltage per leg	I _R	5.0 500.0							μA
Typical junction capacitance per leg (NOTE 1)	C _J	25.0							pF
Typical thermal resistance per leg (NOTE 2)	R _{θJA} R _{θJL}	30.0 11.0							°C/W
* Operating junction and storage temperature range	T _J , T _{STG}	-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

