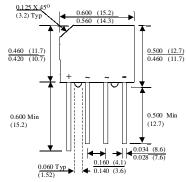


## KBP005M/3N246 - KBP10M/3N252

### **Features**

- Surge overload rating: 50 amperes peak.
- Reliable low cost construction utilizing molded plastic technique.





#### Dimensions are in: inches (mm)

# 1.5 Ampere Bridge Rectifiers

**Absolute Maximum Ratings\*** 

 $T_{\Delta} = 25$ °C unless otherwise noted

Symbol	Parameter	Value	Units
lo	Average Rectified Current @ T <sub>A</sub> = 50°C	1.5	А
İf(surge)	Peak Forward Surge Current	50	A
$P_D$	Total Device Dissipation  Derate above 25°C	3.5 25	W mW/°C
R JA	Thermal Resistance, Junction to Ambient,** per leg	40	°C/W
T <sub>stg</sub>	Storage Temperature Range	-55 to +165	°C
TJ	Operating Junction Temperature	-55 to +165	°C

 $<sup>{}^{\</sup>star}$ These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### **Electrical Characteristics**

T<sub>A</sub> = 25°C unless otherwise noted

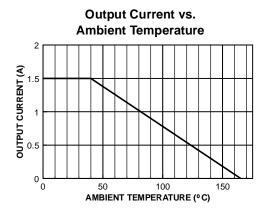
Parameter		Device						Units	
		005M	01M	02M	04M	06M	M80	10M	
		246	247	248	249	250	251	252	
Peak Repetitive Reverse Voltage		50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage		35	70	140	280	420	560	700	V
DC Reverse Voltage	(Rated V <sub>R</sub> )	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage,			l		ı				
total bridge @ rated V <sub>R</sub> T <sub>A</sub> = 25°C					5.0				Α
•	$T_A = 100^{\circ}C$				500				Α
Maximum Forward Vo	Itage Drop,								
per bridge @ 1.0 Å		1.0						V	
@ 3.14 A		1.3						V	
I <sup>2</sup> t rating for fusing t < 8.35 ms		10						A <sup>2</sup> Sec	
Typi cal Junction Capacitance, per leg $V_R = 4.0 \text{ V}$ , f = 1.0 MHz					15				pF

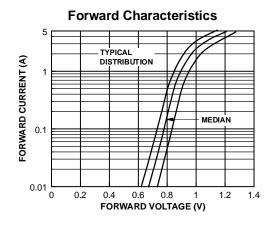
<sup>\*\*</sup>Device mounted on PCB with 0.47 x 0.47" (12 x 12 mm).

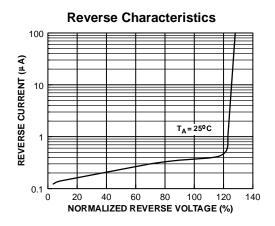
### **Bridge Rectifiers**

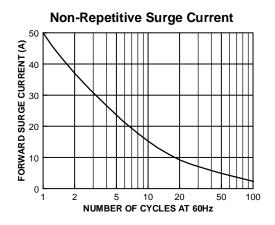
(continued)

### **Typical Characteristics**









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E<sup>2</sup>CMOS<sup>™</sup> PowerTrench<sup>™</sup>

FACT<sup>TM</sup> QS<sup>TM</sup>

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