

KBP005M/3N246 - KBP10M/3N252

Features

- Surge overload rating: 50 amperes peak.
- Reliable low cost construction utilizing molded plastic technique.
- UL certified, UL #E111753.



1.5 Ampere Bridge Rectifiers

Absolute Maximum Ratings*

$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$I_{F(AV)}$	Average Rectified Current @ $T_A = 50^\circ\text{C}$	1.5	A
I_{FSM}	Non-repetitive Peak Forward Surge Current	50	A
P_D	Total Device Dissipation Derate above 25°C	3.5 25	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	40	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature Range	-55 to +165	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +165	$^\circ\text{C}$

*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

**Device mounted on PCB with 0.47 x 0.47" (12 x 12 mm).

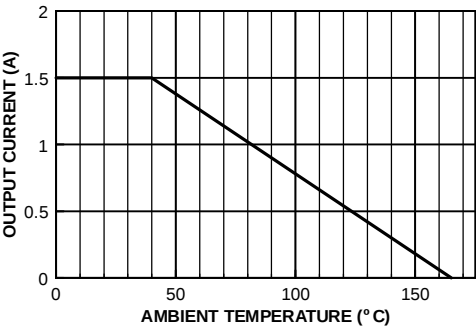
Electrical Characteristics

$T_A = 25^\circ\text{C}$ unless otherwise noted

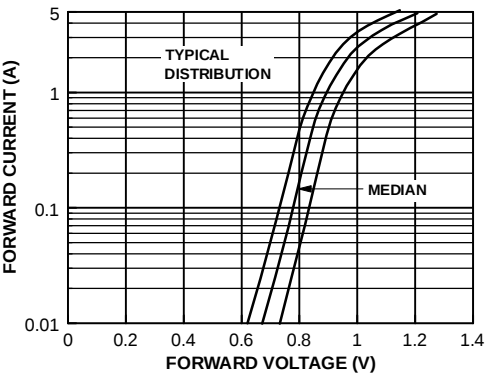
Symbol	Parameter	Device							Units
		005M	01M	02M	04M	06M	08M	10M	
		246	247	248	249	250	251	252	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{RM}	Maximum Instantaneous Reverse Leakage, total bridge @ rated V _R T _A = 25°C T _A = 100°C	5.0 500							μA μA
V _{FM}	Maximum Instantaneous Forward Voltage Drop, per bridge @ 1.0 A @ 3.14 A	1.0 1.3							V V
	I ² t rating for fusing t < 8.35 ms	10							A ² s
C	Typical Junction Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz	15							pF

Typical Characteristics

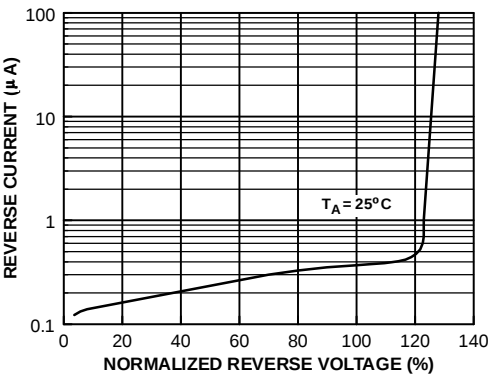
Output Current vs.
Ambient Temperature



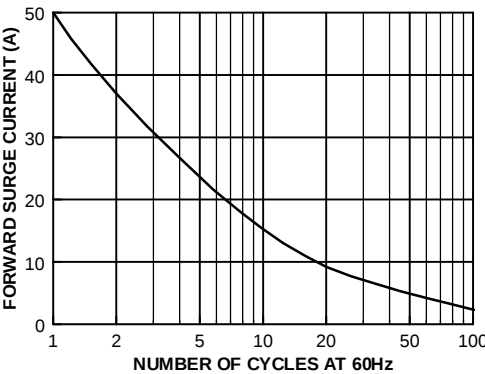
Forward Characteristics



Reverse Characteristics



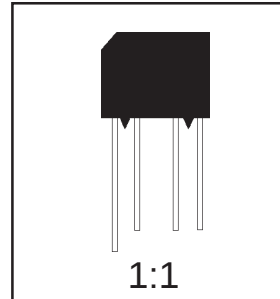
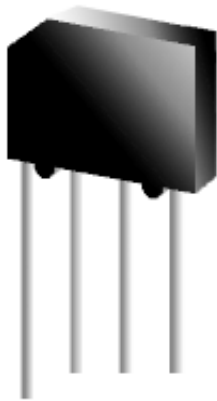
Non-Repetitive Surge Current



KBPM Package Dimensions



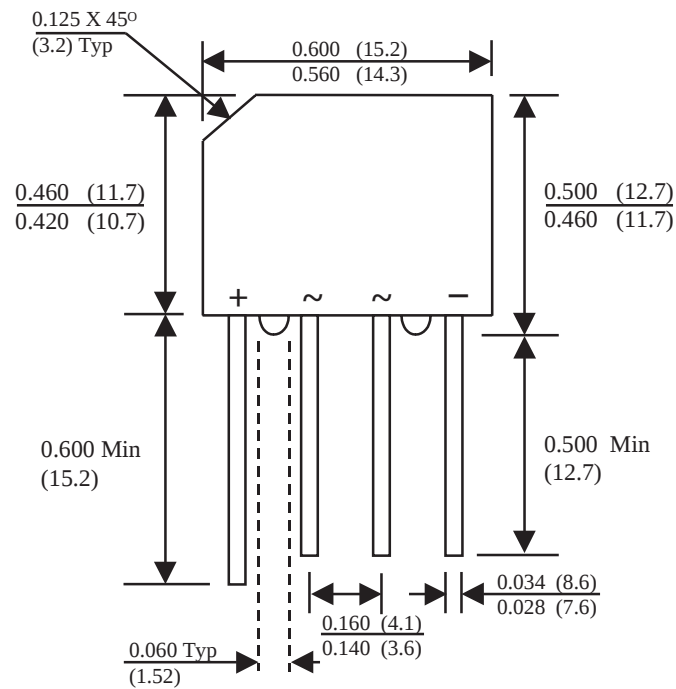
KBPM (FS PKG Code R1)



Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 1.7



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