

2KBP005M/3N253 - 2KBP10M/3N259

Features

- Surge overload rating: 60 amperes peak.
- Reliable low cost construction utilizing molded plastic technique.
- UL certified, UL #E111753.



2.0 Ampere Bridge Rectifiers

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I _{F(AV)}	Average Rectified Current	2.0	A
I _{FSM}	Non-repetitive Peak Forward Surge Current	60	A
P _D	Total Device Dissipation Derate above 25°C	4.7	W
		33	mW/°C
R _{θJA}	Thermal Resistance, Junction to Ambient,** per leg	30	°C/W
T _{stg}	Storage Temperature Range	-55 to +165	°C
T _J	Operating Junction Temperature	-55 to +165	°C

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

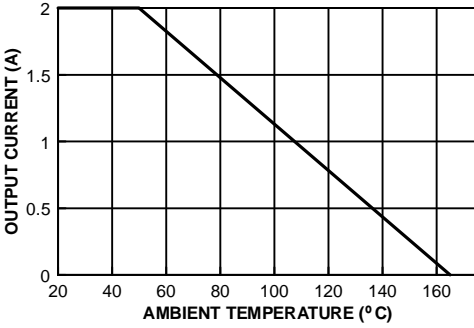
** Device mounted on PCB with 0.47 x 0.47" (12 x 12 mm).

Electrical Characteristics T_A = 25°C unless otherwise noted

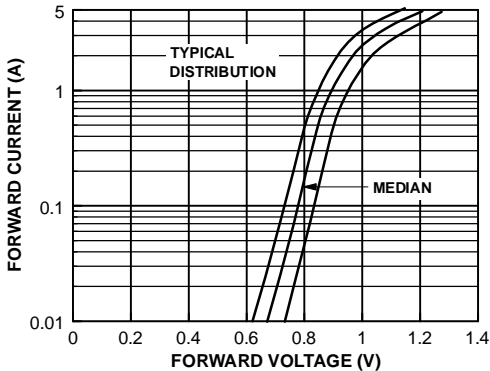
Symbol	Parameter	Device							Units
		005M	01M	02M	04M	06M	08M	10M	
		253	254	255	256	257	258	259	
V _{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V _{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V _R	DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
I _{RM}	Maximum Instantaneous Reverse Leakage, total bridge @ rated V _R T _A = 25°C T _A = 125°C	5.0							μA
		500							μA
V _{FM}	Maximum Instantaneous Forward Voltage Drop, per bridge @ 3.14 A	1.1							V
	I ² t rating for fusing t < 8.35 ms	15							A ² s
C	Typical Junction Capacitance, per leg V _R = 4.0 V, f = 1.0 MHz	25							pF

Typical Characteristics

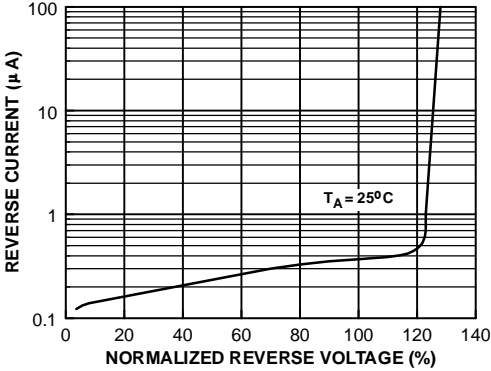
Output Current vs. Ambient Temperature



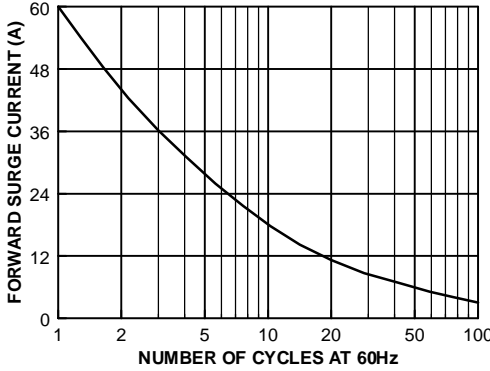
Forward Characteristics



Reverse Characteristics



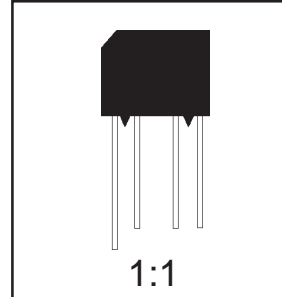
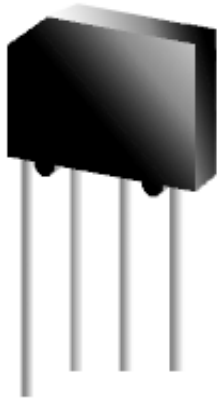
Non-Repetitive Surge Current



KBPM Package Dimensions



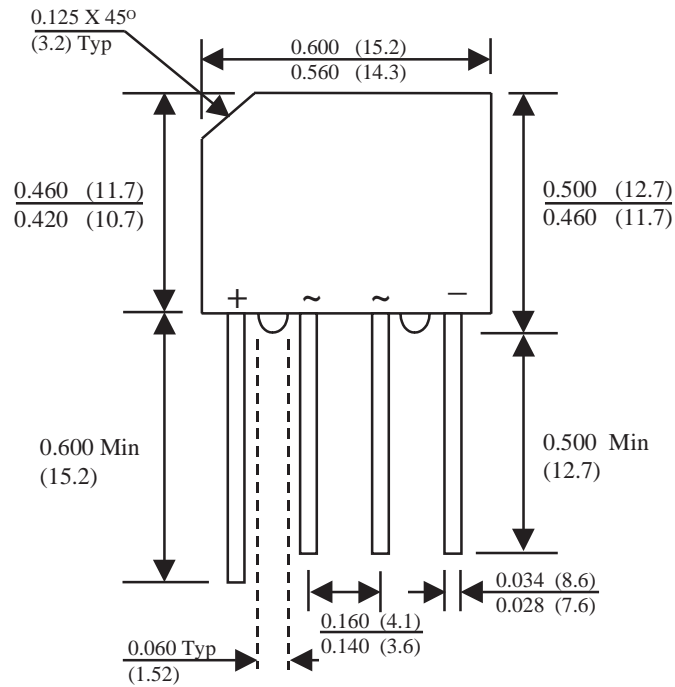
KBPM (FS PKG Code R1)



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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