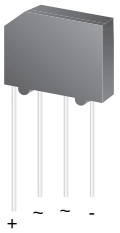
FAIRCHILD SEMICONDUCTOR TM

2KBP005M/3N253 - 2KBP10M/3N259

Features

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



KBPM

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 33	W mW/°C
$R_{\theta JA}$	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).

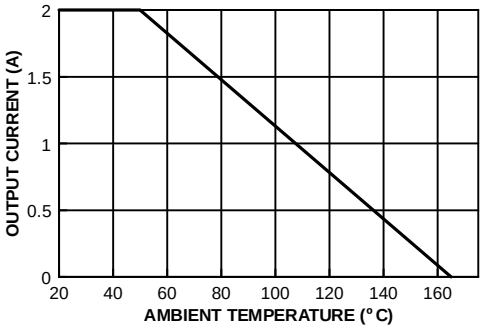
Electrical Characteristics

T_A = 25°C unless otherwise noted

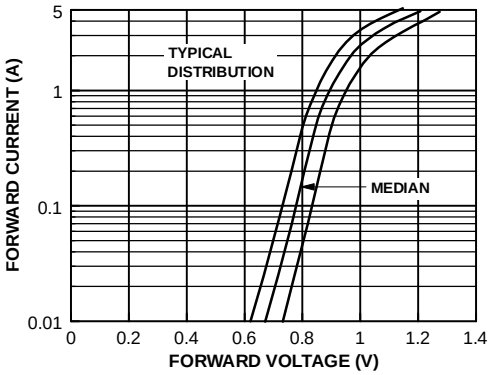
Symbol	Parameter	Device							Units
		005M	01M	02M	04M	06M	08M	10M	
		253	254	255	256	257	258	259	
V_{RRM}	Maximum Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
V_R	DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000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

Typical Characteristics

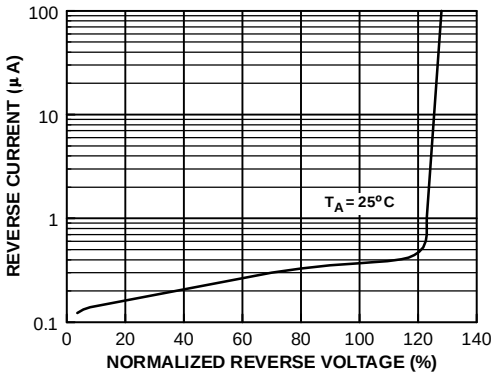
Output Current vs. Ambient Temperature



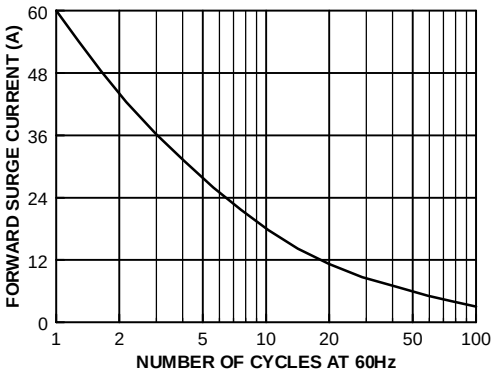
Forward Characteristics



Reverse Characteristics



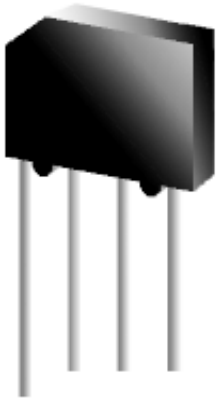
Non-Repetitive Surge Current

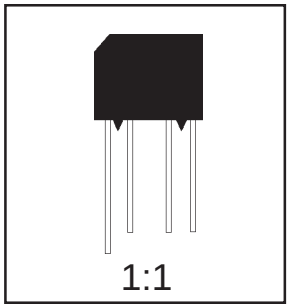


KBPM Package Dimensions

FAIRCHILD SEMICONDUCTOR™

KBPM (FS PKG Code R1)

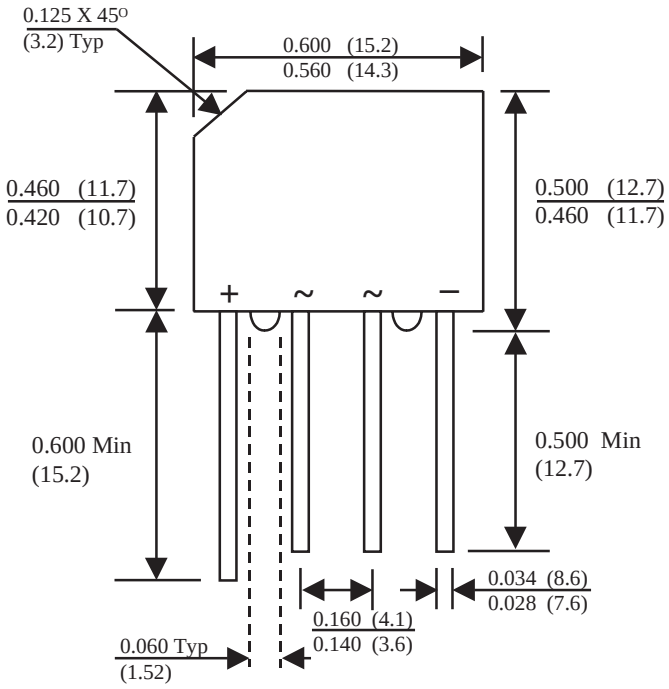




Scale 1:1 on letter size paper

Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 1.7



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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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