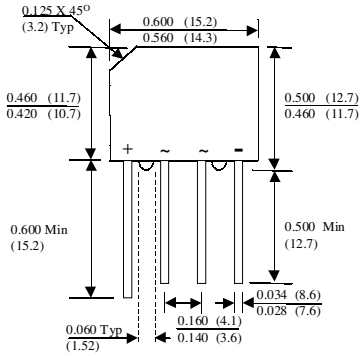
FAIRCHILD
SEMICONDUCTOR TM

KBP005M/3N246 - KBP10M/3N252

Features

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

KBPM



Dimensions are in: inches (mm)

1.5 Ampere Bridge Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ T_A = 50°C	1.5	A
$i_{f(surge)}$	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_{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).

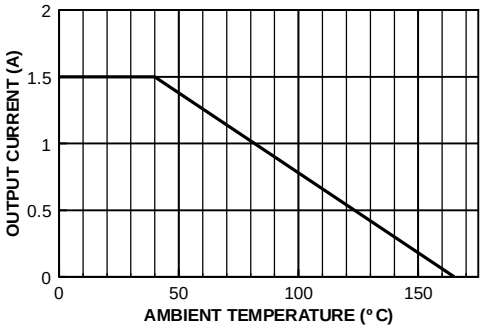
Electrical Characteristics

T_A = 25°C unless otherwise noted

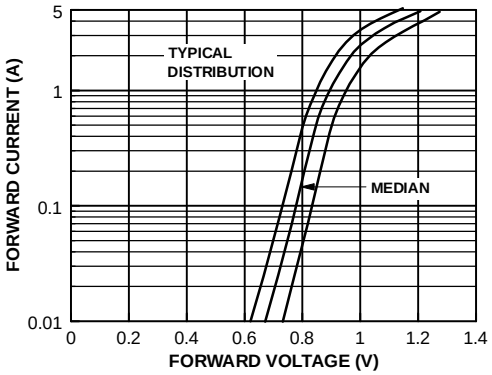
Parameter	Device							Units
	005M	01M	02M	04M	06M	08M	10M	
	246	247	248	249	250	251	252	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total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

Typical Characteristics

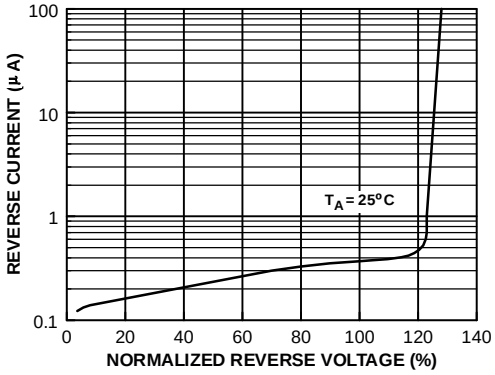
Output Current vs. Ambient Temperature



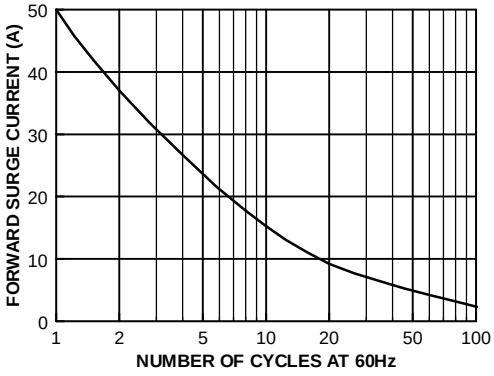
Forward Characteristics



Reverse Characteristics



Non-Repetitive Surge Current



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