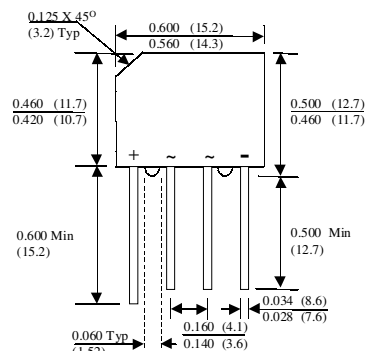


KBP005M/3N246 - KBP10M/3N252

Features

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



Dimensions are in: inches (mm)

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).

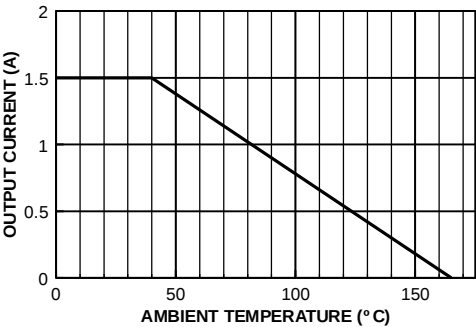
Electrical Characteristics

T_A = 25°C unless otherwise noted

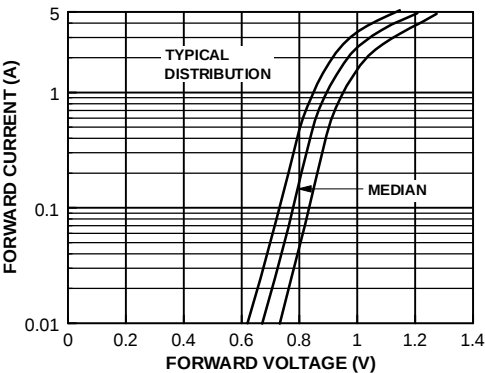
Parameter	Device							Units
	005M	01M	02M	04M	06M	08M	10M	
	246	247	248	249	250	251	252	
Peak Repetitive Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	35	70	140	280	420	560	700	V
DC Reverse Voltage (Rated V _R)	50	100	200	400	600	800	1000	V
Maximum Reverse Leakage, total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

Typical Characteristics

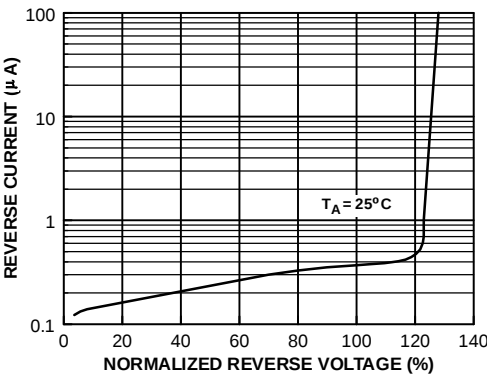
Output Current vs.
Ambient Temperature



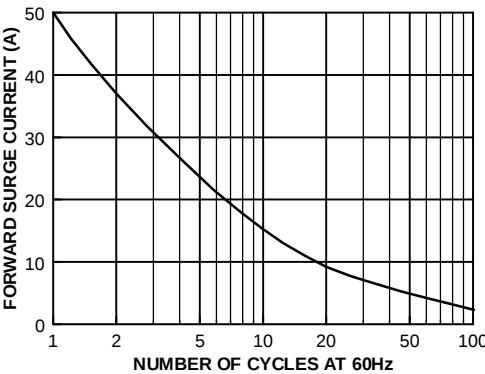
Forward Characteristics



Reverse Characteristics



Non-Repetitive Surge Current



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FACT™	QS™
FACT Quiet Series™	Quiet Series™
FAST®	SuperSOT™-3
FAST ^r ™	SuperSOT™-6
GTO™	SuperSOT™-8
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2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

PRODUCT STATUS DEFINITIONS

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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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