

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*

$T_A = 25^\circ\text{C}$ 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	4.7	W
	Derate above 25°C	33	mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient,** per leg	30	$^\circ\text{C/W}$
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.

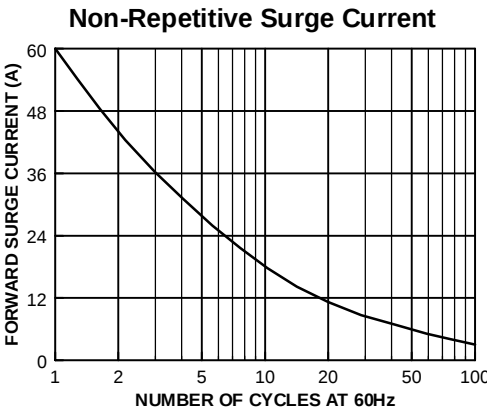
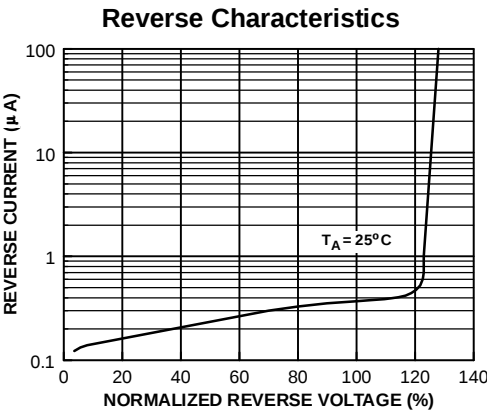
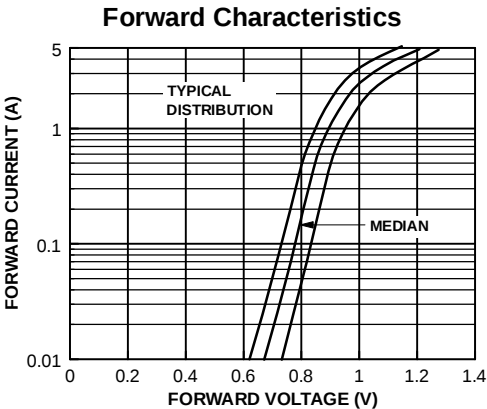
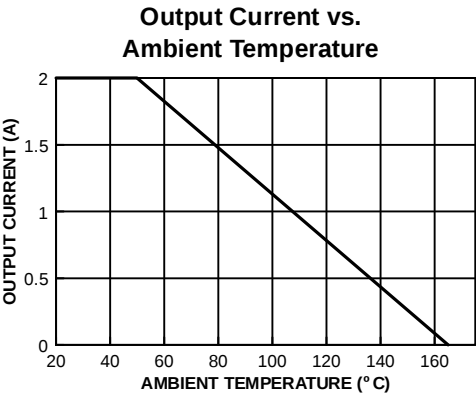
**Device mounted on PCB with 0.47 x 0.47" (12 x 12 mm).

Electrical Characteristics

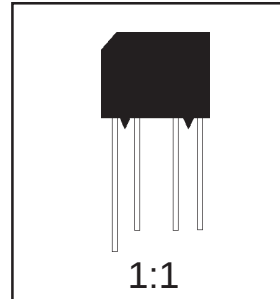
$T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Device								Units
		005M	01M	02M	04M	06M	08M	10M		
		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 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



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Dimensions shown below are in:
inches [millimeters]

0.125 X 45°
(3.2) Typ

0.600 (15.2)
0.560 (14.3)

0.460 (11.7)
0.420 (10.7)

0.500 (12.7)
0.460 (11.7)

0.600 Min
(15.2)

0.500 Min
(12.7)

0.060 Typ
(1.52)

0.160 (4.1)
0.140 (3.6)

0.034 (8.6)
0.028 (7.6)

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