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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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2KBP005M/3N253 - 2KBP10M/3N259

Bridge Rectifiers

Features

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



* The nodules on the package may not be present on the actual parts.

Absolute Maximum Ratings * $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value							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
$I_{F(AV)}$	Average Rectified Forward Current, @ $T_A = 50^\circ\text{C}$	2.0							A
I_{FSM}	Non-Repetitive Peak Forward Surge Current 8.3ms Single Half-Sine-Wave	60							A
T_{STG}	Storage Temperature Range	-55 to +150							$^\circ\text{C}$
T_J	Junction Temperature	-55 to +150							$^\circ\text{C}$

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

Thermal Characteristics

Symbol	Parameter	Value	Units
P_D	Power Dissipation	4.7	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient, * per leg	18	$^\circ\text{C}/\text{W}$

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

Electrical Characteristics $T_a = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units	
V_F	Forward Voltage, per element @ 3.14A	1.1	V	
I_R	Reverse Current, per element @ Rated V_R	$T_A = 25^\circ\text{C}$	5.0	μA
		$T_A = 125^\circ\text{C}$	500	μA
	I^2t Rating for Fusing $t < 8.35\text{ms}$	15	A^2s	
C_T	Total Capacitance, per leg $V_R = 4.0\text{ V}, f = 1.0\text{ MHz}$	25	pF	

Typical Performance Characteristics

Figure 1. Forward Curve Derating Curve

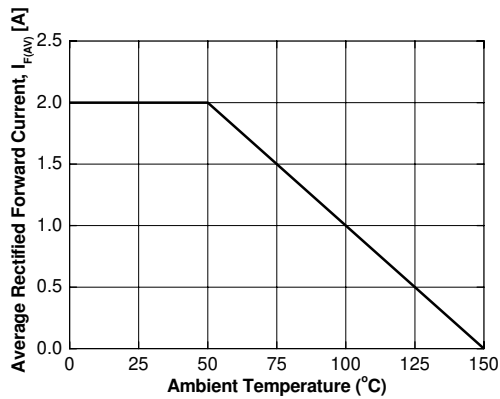


Figure 2. Forward Voltage Characteristics

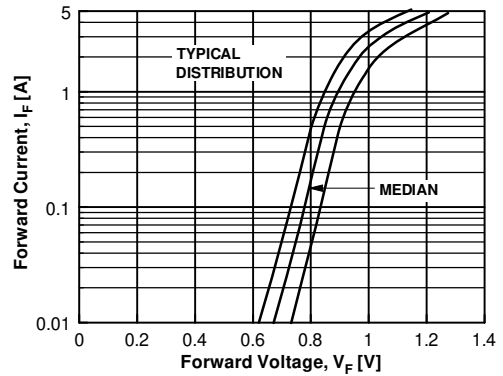


Figure 3. Reverse Current vs Reverse Voltage

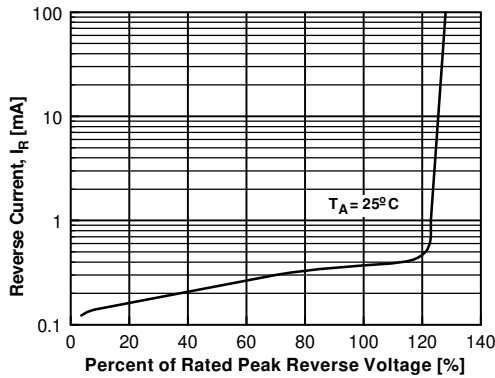
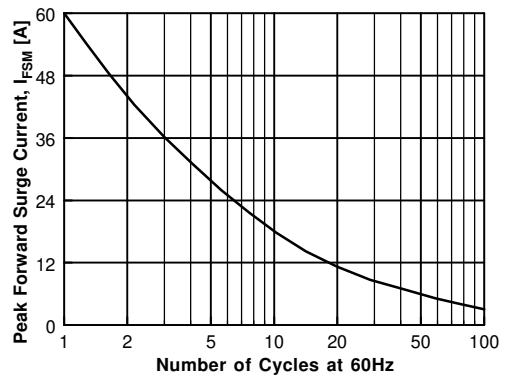







Figure 4. Non-Repetitive Surge Current





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