Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

Silicon Standard Recovery Diode

V_{RRM} = 800 V - 1600 V

I_F = 75 A

Features

- Terminals and the mounting plate are electrically isolated
- Types up to 1600 V V_{RRM}
- Modules can be installed in the same cooling fin as other modules, thus saving installation space
- Diode chips are coated with a glass of zinc oxide, making them highly resistant to temperature and huminity variation
- 6 diode chips are connected to the 3-phase bridge rectifying circuit inside the module; a cost effective feature

Three Phase Package

Applications

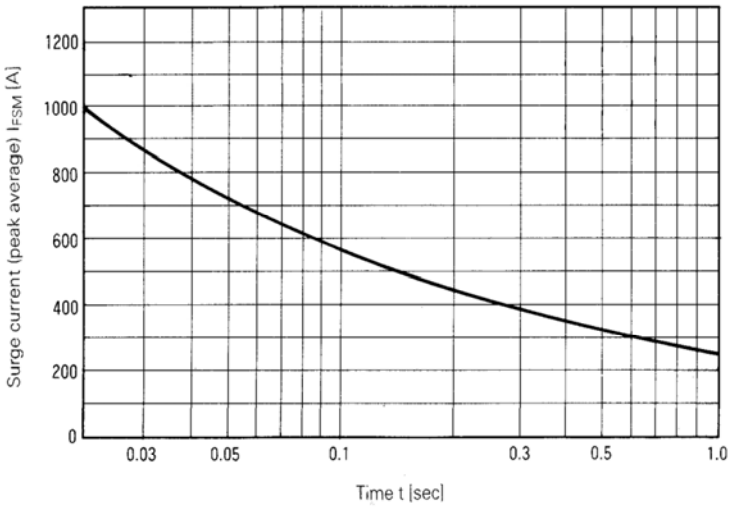
- Inverters for AC motors
- Power supply units for DC motors
- DC power supply units for battery cl
- General purpose DC power supply

Maximum ratings, at T_j = 25 °C, unless otherwise specified

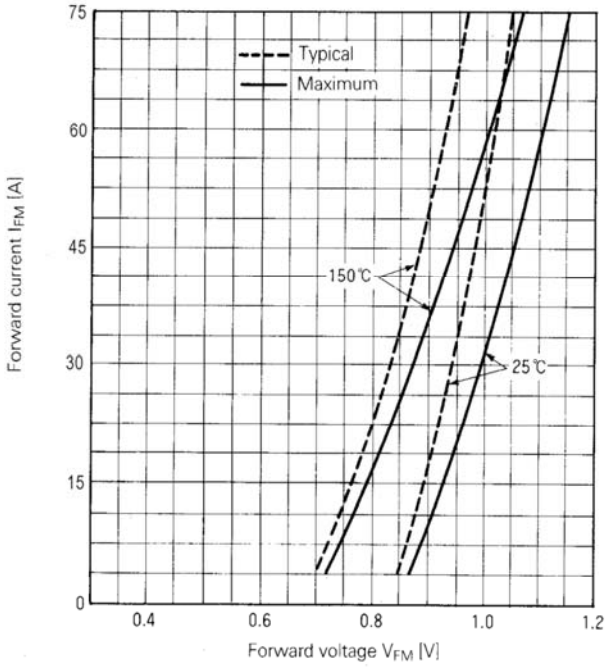
Parameter	Symbol	Conditions	M3P75A-80	M3P75A-160	Unit
Repetitive peak reverse voltage	V_{RRM}	T_J=25°C, I_R=25 µA	800	1600	V
Non-repetitive peak reverse voltage	V_{RSM}	T_J=25°C, I_R=25 µA	880	1700	V
Continuous forward current	I_F	$T_C \leq$ 103 °C	75	75	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	T_C = 25 °C, t_p = 8.3 ms	1000	1000	A
I^2t	I^2t		4400	4400	A^2S
Operating temperature	T_j		-40 to 150	-40 to 150	°C
Storage temperature	T_{stg}		-40 to 125	-40 to 125	°C
Tightening torque			25±2	25±2	kg-cm
Vibration resistance			5	5	G
Dielectric strength			2000 VAC 1 min	2000 VAC 1 min	
Net weight			133	133	g

Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	M3P75A-80	M3P75A-160	Unit
Diode forward voltage	V_F	I_F = 75 A, T_j = 25 °C	1.15	1.15	V
Reverse current		$V_R = V_{RRM,}$ T_j = 150 °C	10	10	mA
Thermal characteristics					
Thermal resistance, junction - case	R_{thJC}		0.25	0.25	°C/W



Surge Current



Forward Characteristics