

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









FR40B05 thru FR40JR05

Silicon Fast Recovery Diode

 $V_{RRM} = 100 \text{ V} - 1000 \text{ V}$ $I_F = 40 \text{ A}$

Features

- High Surge Capability
- Types up to 1000 V V_{RRM}

DO-5 Package



Maximum ratings, at T_j = 25 °C, unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	FR40B(R)05	FR40D(R)05	FR40G(R)05	FR40J(R)05	Unit
Repetitive peak reverse voltage	V_{RRM}		100	200	400	600	V
RMS reverse voltage	V_{RMS}		70	140	280	420	V
DC blocking voltage	V_{DC}		100	200	400	600	V
Continuous forward current	I_{F}	T _C ≤ 100 °C	40	40	40	40	Α
Surge non-repetitive forward current, Half Sine Wave	I _{F,SM}	$T_C = 25 ^{\circ}C, t_p = 8.3 \text{ms}$	500	500	500	500	Α
Operating temperature	Tj		-40 to 125	-40 to 125	-40 to 125	-40 to 125	°C
Storage temperature	T_{stg}		-40 to 150	-40 to 150	-40 to 150	-40 to 150	°C

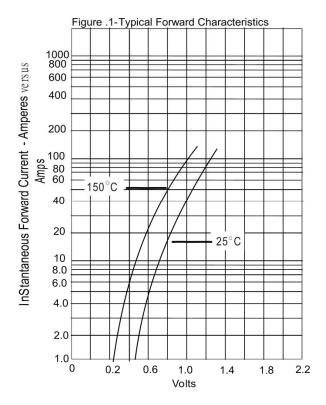
Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	FR40B(R)05	FR40D(R)05	FR40G(R)05	FR40J(R)05	Unit
Diode forward voltage	V_{F}	I _F = 40 A, T _j = 25 °C	1.4	1.4	1.4	1.4	V
Reverse current	I _R	$V_R = 100 \text{ V}, T_j = 25 ^{\circ}\text{C}$	25	25	25	25	μA
		$V_R = 100 \text{ V}, T_j = 125 ^{\circ}\text{C}$	10	10	10	10	mA
Recovery Time							
Maximum reverse recovery time	T _{RR}	I _F =0.5 A, I _R =1.0 A, I _{RR} = 0.25 A	500	500	500	500	nS
Thermal characteristics							
Thermal resistance, junction - case	R_{thJC}		0.8	0.8	0.8	0.8	°C/W

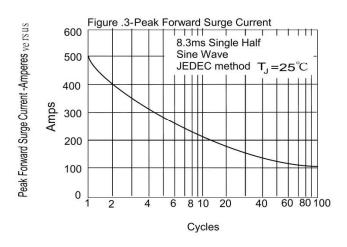




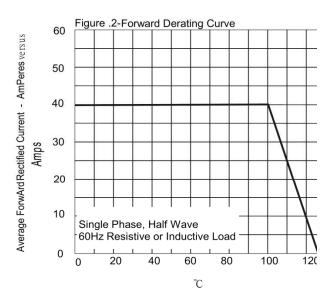
FR40B05 thru FR40JR05



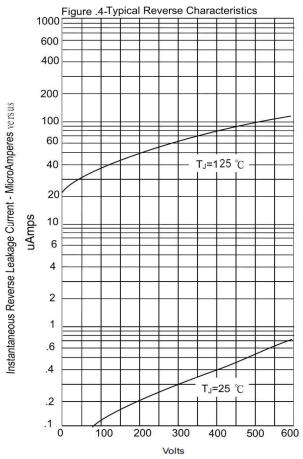
Instantaneous Forward Voltage - Volts



Number Of Cycles At 60Hz - Cycles



Case Temperature - $^{\circ}\!\mathbb{C}$



Percent Of Rated Peak Reverse Voltage - Volts