# imall

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 Power Schottky Diode

#### Features

- High Surge Capability
- Types up to 40V  $V_{RRM}$

## 1N6097 thru 1N6098R

## $V_{\text{RRM}} = 30 \text{ V} - 40 \text{ V}$ $I_{\text{F}} = 50 \text{ A}$

**DO-5 Package** 



#### Maximum ratings, at T<sub>i</sub> = 25 °C, unless otherwise specified ("R" devices have leads reversed)

Parameter	Symbol	Conditions	1N6097 (R)	1N6098 (R)	Unit
Repetitive peak reverse voltage	V <sub>RRM</sub>		30	40	V
RMS reverse voltage	V <sub>RMS</sub>		21	28	V
DC blocking voltage	V <sub>DC</sub>		30	40	V
Continuous forward current	I <sub>F</sub>	T <sub>C</sub> ≤ 100 °C	50	50	А
Surge non-repetitive forward current, Half Sine Wave	I <sub>F,SM</sub>	$T_{C}$ = 25 °C, $t_{p}$ = 8.3 ms	400	400	А
Operating temperature	Ti		-65 to 150	-65 to 150	°C
Storage temperature	T <sub>stg</sub>		-65 to 175	-65 to 175	°C

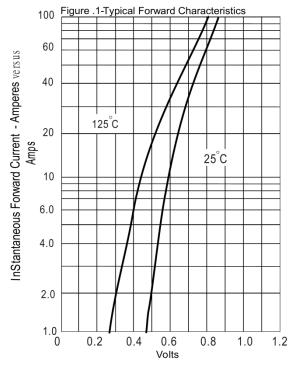
#### Electrical characteristics, at Tj = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	1N6097 (R)	1N6098 (R)	Unit
Diode forward voltage	V <sub>F</sub>	I <sub>F</sub> = 50 A, T <sub>j</sub> = 25 °C	0.7	0.7	V
Reverse current	I <sub>R</sub>	$V_R = 30 \text{ V}, \text{ T}_j = 25 \text{ °C}$ $V_R = 30 \text{ V}, \text{ T}_i = 125 \text{ °C}$	5 250	5 250	mA
Thermal characteristics					
Thermal resistance, junction - case	$R_{thJC}$		1.0	1.0	°C/W

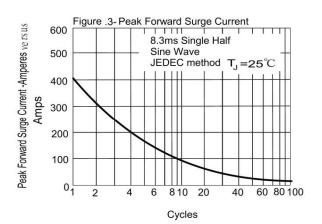




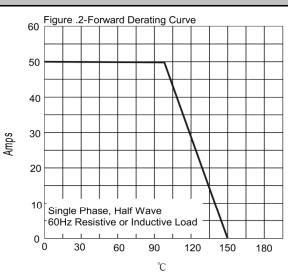
### 1N6097 thru 1N6098R



Instantaneous Forward Voltage - Volts

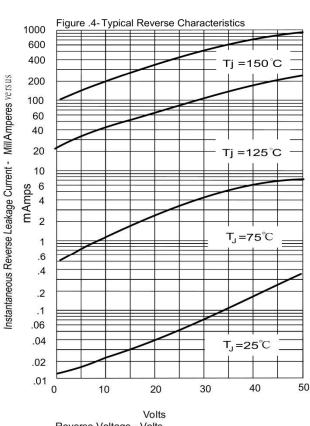


Number Of Cycles At 60Hz - Cycles



Case Temperature - °C

Average ForwArd Rectified Current - AmPeres versus



Reverse Voltage - Volts

