mail

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

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TECHNICAL DATA SHEET

6 Lake Street, Lawrence, MA 01841 1-800-446-1158 / (978) 620-2600 / Fax: (978) 689-0803 Website: http://www.microsemi.com

> (1) Derate @ 300mA/°C above $T_C = 100°C$ (2) Pulse Test; 300 μ S, duty cycle $\leq 2\%$

DUAL ULTRAFAST POWER RECTIFIER Qualified per MIL-PRF-19500/616

DEVICES

1N6657R
1N6658R
1N6659R

ABSOLUTE MAXIMUM RATINGS ($T_c = +25^{\circ}C$ unless otherwise noted) (Per Diode)

Parameters / Test Conditions		Symbol	Value	Unit
Peak Repetitive Reverse Voltage	1N6657, R		100	
	1N6658, R	V _{RWM}	150	Vdc
	1N6659, R		200	
Average Forward Current ⁽¹⁾	$T_{C} = +100^{\circ}C$	$I_{\rm F}$	15	Adc
Peak Surge Forward Current		I _{FSM}	150	A(pk)
Thermal Resistance - Junction to Ca	se	$R_{\theta jc}$	2.3	°C/W

ELECTRICAL CHARACTERISTICS ($T_A = +25^{\circ}C$, unless otherwise noted)





TO-254



1N6657, 1N6658, 1N6659



1N6657R, 1N6658R, 1N6659R

Parameters / Test	Conditions	Symbol	Min.	Max.	Unit
OFF CHARACTERTICS					
Breakdown Voltage ⁽²⁾ $I_R = 500 \mu Adc$	1N6657, R 1N6658, R 1N6659, R	V _{BR}	100 150 200		Vdc
Forward Voltage ⁽²⁾ $I_F = 10Adc$ $I_F = 20Adc$		$V_{F1} \ V_{F2}$		1.0 1.2	Vdc
Reverse Leakage Current ⁽²⁾ $V_R = 100V$ $V_R = 150V$ $V_R = 200V$	1N6657, R 1N6658, R 1N6659, R	I _{R1}		10	μAdc
Reverse Leakage Current $V_R = 100V, T_C = +100^{\circ}C$ $V_R = 150V, T_C = +100^{\circ}C$ $V_R = 200V, T_C = +100^{\circ}C$	1N6657, R 1N6658, R 1N6659, R	I _{R2}		1.0	mAdc
Reverse Recovery Time $I_F = 1.0A, I_R = 1A, I_{RR} = 100 \text{mA}$		t _{rr}		35	nS
Junction Capacitance $V_R = 10Vdc, f = 1.0MHz, V_{SIG} =$	= 50mV(p-p) max	C _J		150	pF