

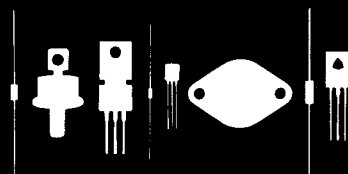
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145 Adams Avenue
Hauppauge, New York 11788



1N3909 THRU 1N3913

SILICON FAST RECOVERY
POWER RECTIFIER

JEDEC DO-5 CASE

DESCRIPTION

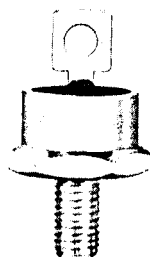
The CENTRAL SEMICONDUCTOR 1N3909 Series types are stud mounted Silicon Power Rectifiers designed for DC Power Supply, inverter applications where fast recovery times are needed.

MAXIMUM RATINGS ($T_C=25^{\circ}\text{C}$ unless otherwise noted)

	SYMBOL	1N3909	1N3910	1N3911	1N3912	1N3913	UNIT
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	300	400	V
Non-Rep Peak Reverse Voltage	V_{RSM}	75	150	250	350	450	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	V
Average Rectifier Forward Current ($T_C=100^{\circ}\text{C}$)	I_O			30			A
Peak Non-Rep Surge Current Operating and Storage	I_{FSM}			300			A
Junction Temperature	T_J, T_{stg}			-65 TO +175			$^{\circ}\text{C}$
Thermal Resistance	θ_{JC}			1.2			$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_C=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_R	$V_R=\text{Rated } V_{RRM}$		25	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=100^{\circ}\text{C}$		1.0	mA
V_F	$I_F=30\text{A}$		1.4	V
V_F	$I_F=93\text{A}, T_J=150^{\circ}\text{C}$		1.5	V
t_{rr}	$I_F=1.0\text{A}, V_R=30\text{V}$		200	ns
t_{rr}	$I_{FM}=36\text{A}, di/dt=25\text{A}/\mu\text{s}$		400	ns
$I_{RM(REC)}$	$I_F=1.0\text{A}, V_R=30\text{V}$		2.0	A



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