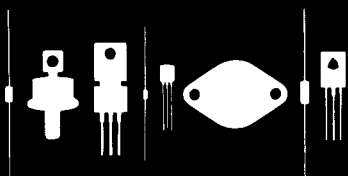


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145 Adams Avenue
Hauppauge, New York 11788



1N3889A THRU 1N3893A
1N3889RA THRU 1N3893RA

FAST RECOVERY
SILICON POWER RECTIFIER
12 AMPS 50 THRU 400 VOLTS

JEDEC DO-4 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N3889A series types are medium current silicon power rectifiers designed for fast recovery rectifier applications. Normal polarity is cathode to case, for reverse polarity add 'R' to part number (EX: 1N3889RA). Higher voltage devices are available on special order.

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

	SYMBOL	1N 3889A	1N 3890A	1N 3891A	1N 3892A	1N 3893A	UNIT
Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	75	150	250	350	450	V
RMS Reverse Voltage	$V_R(\text{RMS})$	35	70	140	210	280	V
Average Forward Current ($T_C=150^\circ$)	I_O				12		A
Peak Surge Current	I_{FSM}				300		A
Operating and Storage Junction Temperature	T_J, T_{STG}				-65 to +175		$^\circ\text{C}$
Thermal Resistance	θ_{JC}				1.75		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
V_F	$I_F=12\text{A}$		1.1	V
V_F	$I_F=38\text{A}, T_C=150^\circ\text{C}$		1.2	V
I_R	$V_R=\text{Rated } V_{RRM}$		25	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=100^\circ\text{C}$		3.0	mA
I_{RM}	$V_R=30\text{V}, I_F=1.0\text{A}$		5.0	A
t_{rr}	$V_R=30\text{V}, I_F=1.0\text{A}$		200	ns
t_{rr}	$I_{FM}=40\text{A}, di/dt=25\text{A}/\mu\text{s}$		300	ns

**Central™
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145 Adams Avenue
Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824
www.centralsemi.com