

New Jersey Semi-Conductor Products, Inc.

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U.S.A.

1N3889A THRU 1N3893A
1N3889RA THRU 1N3893RA

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DESCRIPTION
MEDIUM CURRENT.

FAST RECOVERY.

ADD (R) FOR REVERSE.

FAST RECOVERY
SILICON POWER RECTIFIER
12 AMPS 50 THRU 400 VOLTS

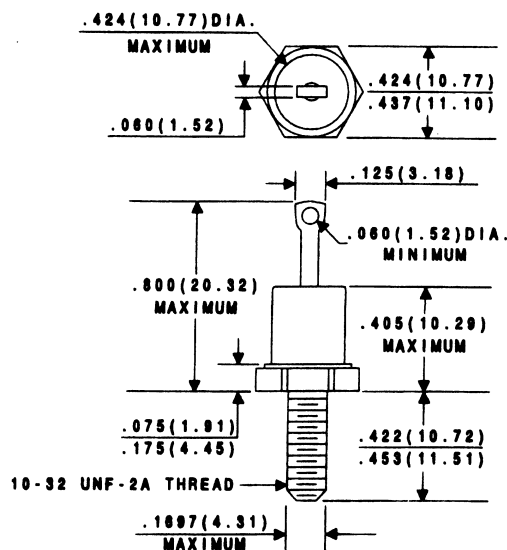
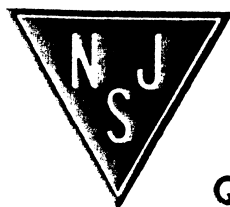
JEDEC DO-4 CASE

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



Quality Semi-Conductors