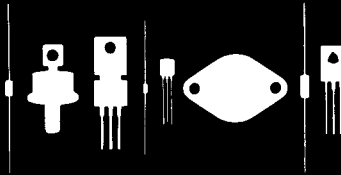


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145 Adams Avenue
Hauppauge, New York 11788



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°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(RMS)} | 35 | 70 | 140 | 210 | 280 | V |
| Average Forward Current (T _C =150°) | I _O | | | | 12 | | A |
| Peak Surge Current | I _{FSM} | | | | 300 | | A |
| Operating and Storage Junction Temperature | T _J , T _{STG} | | | | -65 to +175 | | °C |
| Thermal Resistance | θ _{JC} | | | | 1.75 | | °C/W |

ELECTRICAL CHARACTERISTICS (T_C=25°C unless otherwise noted)

| SYMBOL | TEST CONDITIONS | MIN | MAX | UNIT |
|-----------------|--|-----|-----|------|
| V _F | I _F =12A | | 1.1 | V |
| V _F | I _F =38A, T _C =150°C | | 1.2 | V |
| I _R | V _R =Rated V _{RRM} | | 25 | μA |
| I _R | V _R =Rated V _{RRM} , T _C =100°C | | 3.0 | mA |
| I _{RM} | V _R =30V, I _F =1.0A | | 5.0 | A |
| t _{rr} | V _R =30V, I _F =1.0A | | 200 | ns |
| t _{rr} | I _{FM} =40A, di/dt=25A/μs | | 300 | ns |

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