

MOTOROLA
SEMICONDUCTOR
 TECHNICAL DATA

1N1183A
 thru
1N1190A

1N1190A is a
 Motorola Preferred Device

MEDIUM-CURRENT RECTIFIERS

... for applications requiring low forward voltage drop and rugged construction.

- High Surge Handling Ability
- Rugged Construction
- Reverse Polarity Available; Eliminates Need for Insulating Hardware in Many Cases
- Hermetically Sealed

40-AMP
RECTIFIERS

SILICON
DIFFUSED-JUNCTION



CASE 42A-01
DO-203AB
METAL

***MAXIMUM RATINGS**

Rating	Symbol	1N1183A	1N1184A	1N1186A	1N1188A	1N1190A	Unit
Peak Repetitive Reverse Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	Volts
Average Half-Wave Rectified Forward Current With Resistive Load (at T _A = 150°C)	I _O	40	40	40	40	40	Amp
Peak One Cycle Surge Current (60 Hz and 150°C Case Temperature)	I _{FSM}	800	800	800	800	800	Amp
Operating Junction Temperature	T _J	65 to +200					°C
Storage Temperature	T _{stg}	-65 to +200					°C

***ELECTRICAL CHARACTERISTICS (All Types) at 25°C Case Temperature**

Characteristic	Symbol	Value	Unit
Maximum Forward Voltage at 100 Amp DC Forward Current	V _F	1.1	Volts
Maximum Reverse Current at Rated DC Reverse Voltage	I _R	5.0	mA _{dc}

THERMAL CHARACTERISTICS

Characteristic	Symbol	Typical	Unit
Thermal Resistance, Junction to Case	R _{θJC}	1.0	°C/W

*Indicates JEDEC registered data

MECHANICAL CHARACTERISTICS

CASE: Welded, hermetically sealed construction
FINISH: All external surfaces corrosion-resistant and the terminal lead is readily solderable
WEIGHT: 25 grams (approx)
POLARITY: Cathode connected to case (reverse polarity available denoted by Suffix R, i.e. 1N1183RA)
MOUNTING POSITION: Any
MOUNTING TORQUE: 25 in-lb max

3