

New Jersey Semi-Conductor Products, Inc.

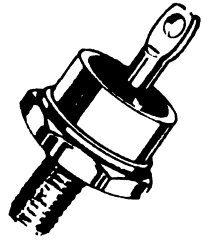
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1N1183A thru 1N1190A

STUD MOUNTED POWER RECTIFIERS

50-1000 VOLTS
35, 40 AMPERES



MAXIMUM RATINGS

Rating	Symbol	1N 1183 A	1N 1184 A	1N 1185 A	1N 1186 A	1N 1190 A	1N 3766	1N 3768	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Working Peak Reverse Voltage	V_{RWM}								
DC Blocking Voltage	V_R								
Non repetitive Peak Reverse Voltage	V_{RSM}	75	150	275	500	725	950	1200	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	Volts

1N1183 thru 1N1190, 1N 3766, 1N 3768

Average Rectified Forward Current (Single phase, resistive load, $T_C = 100^\circ C$)	I_O	← 35 →		Amp
Non-Repetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	← 500 (one cycle) →		Amp

1N 1183A thru 1N 1190A

Average Rectified Forward Current (Single phase, resistive load, $T_C = 100^\circ C$)	I_O	← 40 →		Amp
Non-Repetitive Peak Surge Current (surge applied at rated load conditions)	I_{FSM}	← 800 (one cycle) →		Amp
Operating Junction Temperature Range	T_J	← -65 to +200 →		$^\circ C$
Storage Temperature Range	T_{stg}	← -65 to +200 →		$^\circ C$

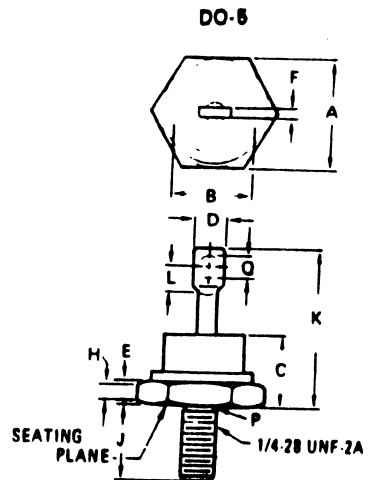
THERMAL CHARACTERISTICS

Characteristic	Symbol	Typ	Max	Unit
Thermal Resistance, Junction to Case 1N 1183 1N 1183 A	$R_{\theta JC}$	0.9 0.7	1.0 0.9	$^\circ C/W$ $^\circ C/W$

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Instantaneous Forward Voltage ($I_F = 100 \text{ Amp.}, T_J = 25^\circ C$)	V_F	1.10 1.30	Volts
Reverse Current (rated dc voltage) $T_C = 25^\circ C$ $T_C = 150^\circ C$	i_R	100 5.0	μA mA

Type numbers shown have cathode connected to case, but reverse-polarity units can be obtained by adding suffix "R" to standard type number.



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	16.94	17.48	0.667	0.697
B	-	16.94	-	0.667
C	-	11.43	-	0.450
D	-	6.63	-	0.275
E	2.92	5.08	0.115	0.200
F	-	2.93	-	0.090
H	1.52	-	0.060	-
J	10.72	11.51	0.422	0.453
K	-	25.40	-	1.000
L	3.80	-	0.152	-
P	6.59	6.32	0.220	0.249
Q	3.56	4.46	0.140	0.175

- NOTES
1. Dimension "F" is diameter.
2. All JEDEC dimensions and notes apply.

