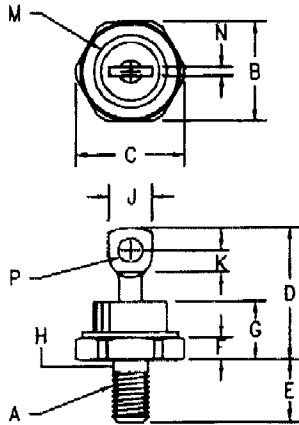


# Silicon Power Rectifier

## 1N1183-1N1190, 1N3765-1N3768



- Notes:
1. Full threads within 2 1/2 threads
  2. Standard Polarity: Stud is Cathode  
 Reverse Polarity: Stud is Anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	---	---	---	1/4-28
B	.667	.687	16.95	17.44	
C	---	.793	---	20.14	
D	---	1.00	---	25.40	
E	.422	.453	10.72	11.50	
F	.115	.200	2.92	5.08	
G	---	.450	---	11.43	
H	.220	.249	5.59	6.32	1
J	.250	.375	6.35	9.52	
K	.156	---	3.97	---	
M	---	.667	---	16.94	Dia
N	---	.080	---	2.03	
P	.140	.175	3.56	4.44	Dia

D0203AB (D0-5)

JEDEC Numbers	Peak Reverse Voltage
1N1183, 1N1183A	50V
1N1184, 1N1184A	100V
1N1185, 1N1185A	150V
1N1186, 1N1186A	200V
1N1187, 1N1187A	300V
1N1188, 1N1188A	400V
1N1189, 1N1189A	500V
1N1190, 1N1190A	600V
1N3765	700V
1N3766	800V
1N3767	900V
1N3768	1000V

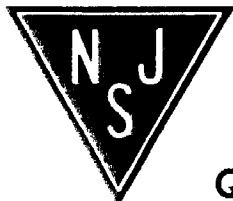
For Reverse Polarity add R to Part Number

- Glass Passivated Die
- 800A surge rating
- Glass to metal construction
- $V_{RRM}$  to 1000V

### Electrical Characteristics

Average forward current	$I_F(AV)$ 40 Amps	$T_C = 146^\circ C$ , half sine wave, $R_{\theta JC} = 1.25^\circ C/W$
Maximum surge current	$I_{FSM}$ 800 Amps	8.3ms, half sine, $T_J = 200^\circ C$
Max $I^2 t$ for fusing	$I^2 t$ 2600 A <sup>2</sup> s	
Max peak forward voltage	$V_{FM}$ 1.19 Volts	$I_{FM} = 90A; T_J = 25^\circ C^*$
Max peak reverse current	$I_{RM}$ 10 $\mu A$	$V_{RRM}, T_J = 25^\circ C$
Max peak reverse current	$I_{RM}$ 2.0 mA	$V_{RRM}, T_J = 150^\circ C$
Max Recommended Operating Frequency	10kHz	

\*Pulse test: Pulse width 300  $\mu sec$ . Duty cycle 2%



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## Thermal and Mechanical Characteristics

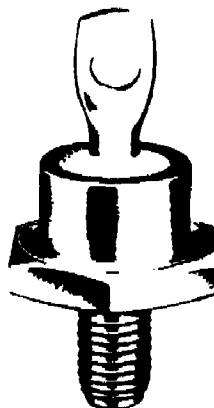
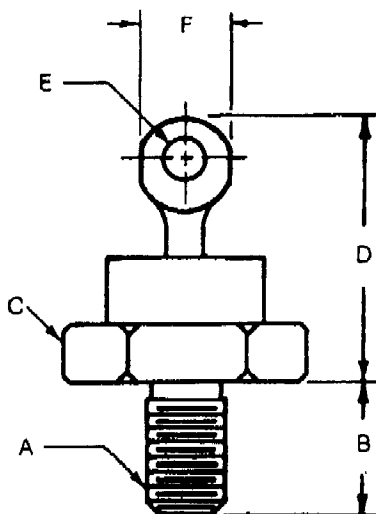
Storage temperature range	TSTG	-65°C to 200°C
Operating junction temp range	TJ	-65°C to 200°C
Maximum thermal resistance	RθJC	1.25°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.5 ounces (14 grams) typical

## Silicon Power Rectifiers

### 35 AMP - DO 5

JEDEC Numbers	Peak Reverse Voltage
1N1183, 1N2458	50
1N1184, 1N2459	100
1N1185, 1N2460	150
1N1186, 1N2461, 1N2788, 1N3968, 1N4525	200
1N2462	250
1N1187, 1N2282, 1N2463	300
1N2464	350
1N1188, 1N2283, 1N2465, 1N2789, 1N3969, 1N4526	400
	450
1N1189, 1N2284, 1N2466	500
1N1190, 1N2285, 1N2467, 1N3970, 1N4527	600
1N3765	700
1N2286, 1N3766, 1N3971, 1N4528	800
1N3767	900
1N2287, 1N3768, 1N4529	1000
	1100
1N2288, 1N4530, 1N5332	1200

JEDEC Numbers	Peak Reverse Voltage
1N1183A, 1N2128	50
1N1184A, 1N2129	100
1N1185A, 1N2130	150
1N1186A, 1N2131	200
1N2132	250
1N1187A, 1N2133	300
1N2134	350
1N1188A, 1N2135	400
1N2136	450
1N1189A, 1N2137	500
1N1190A, 1N2138	600



Dim	Inches		Millimeters		Notes
	Minimum	Maximum	Minimum	Maximum	
A	—	—	—	—	1
B	44	47	11.11	11.89	
C	67	69	16.94	17.46	2
D	—	1.00	—	25.40	
E	15	18	3.81	4.69	
F	—	28	—	7.14	

**Note 1:**  
¼"-28 UNF-2A

**Note 2:**  
Across Flats