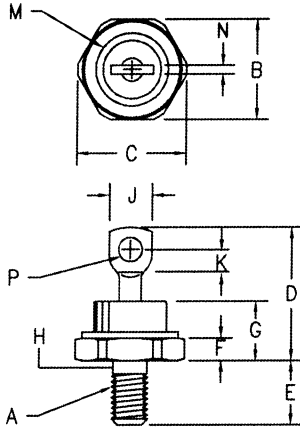


New Jersey Semi-Conductor Products, Inc.

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S306 Series
Silicon Power Rectifier



- Notes:
 1. 1/4-28
 2. Full threads within 2 1/2 threads
 3. Standard polarity:
 Stud is cathode
 Reverse polarity:
 Stud is anode

Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	----	----	----	----	1
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	2.93	5.08	
G	----	.450	----	11.43	
H	.220	.249	5.59	6.32	2
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

(D05)

Standard
 S30620
 S30640
 S30660
 S30680
 S306100
 S306120

Voltage
 200V
 400V
 600V
 800V
 1000V
 1200V

- Glass Passivated Die
- 1200 Amps Surge Rating
- Glass to metal seal construction
- VRRM to 1200V

Electrical Characteristics		
Average forward current	IF(AV) 70 Amps	TC = 146°C, Half Sine Wave, RθJC = 0.8°C/W 8.3ms, half sine, TJ = 200°C
Maximum surge current	IFSM 1200 Amps	
Max I ² t for fusing	I ² t 5900 A ² s	IFM = 200A: TJ = 25°C*
Max peak forward voltage	VFM 1.25 Volts	
Max peak reverse current	IRM 25 μA	VRRM, TJ = 25°C
Max peak reverse current	IRM 4.0 mA	VRRM, TJ = 150°C
Max Recommended Operating Frequency	10kHz	

*Pulse test: Pulse width 300 μsec. Duty cycle 2%

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	0.8°C/W Junction to Case
Mounting torque		25-30 inch pounds
Weight		.6 ounces (17 grams) typical