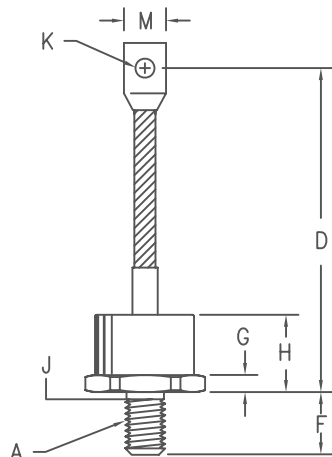
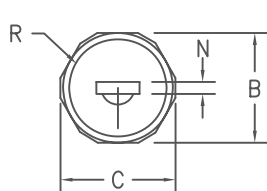


Silicon Power Rectifier

1N3161 — 1N3177



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	3/4-16 UNF		---	---	1
B	1.218	1.250	30.93	31.75	
C	1.350	1.375	34.29	34.93	
D	5.30	5.90	134.62	149.86	
F	.793	.828	20.14	21.03	
G	.300	.325	7.62	8.25	
H	---	.900	---	22.86	
J	.660	.745	16.76	19.02	2
K	.338	.348	8.58	8.84	Dia.
M	.665	.755	16.89	19.17	
N	.125	.172	3.18	4.37	
R	---	1.10	---	27.94	Dia.

Notes:

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

D0205AB (D09)

Microsemi Catalog Number

1N3161
1N3162
1N3163
1N3164
1N3165
1N3166
1N3167
1N3168
1N3169
1N3170
1N3171,A
1N3172,A
1N3173,A
1N3174,A
1N3175
1N3176
1N3177

Peak Reverse Voltage

50V
100V
150V
200V
250V
300V
350V
400V
500V
600V
700V
800V
900V
1000V
1200V
1400V
1600V

Add R suffix for reverse polarity

- Glass to metal seal construction
- High surge current capability
- Glass Passivated Die
- Rugged construction
- V_{RRM} 50-1600 Volts

Electrical Characteristics

Max average forward current
Max surge current
Max. I^2t capability for fusing
Max peak forward voltage
Max peak reverse current
Max peak reverse current
Max recommended operating frequency

$I_F(AV)$ 240 Amps
 I_{FSM} 3000 Amps
 I^2t 37,480²S
 V_{FM} 1.25 Volts
 I_{RRM} 10mA
 I_{RRM} 75 μ A
7.5 kHz

$T_C = 149^\circ\text{C}$, Half sine wave, $R_{\theta JC} = 0.20^\circ\text{C/W}$
8.3ms, half sine, $T_J = 200^\circ\text{C}$
less than 8.33ms
 $I_F = 240A$: $T_C = 25^\circ\text{C}$
 V_{RRM} , $T_C = 150^\circ\text{C}$
 V_{RRM} , $T_C = 25^\circ\text{C}$

Thermal and Mechanical Characteristics

Operating junction temp range
Storage temperature range
Maximum thermal resistance
Typical thermal resistance (greased)
Max mounting torque
Weight

T_J
 T_{STG}
 $R_{\theta JC}$
 $R_{\theta CS}$

-65°C to 200°C
 -65°C to 200°C
 0.20°C/W Junction to case
 $.08^\circ\text{C/W}$ Case to sink
300-325 inch pounds
8.5 ounces (240 grams) typical



LAWRENCE

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05-01-07 Rev. 2

1N3161 — 1N3177

Figure 1
Typical Forward Characteristics

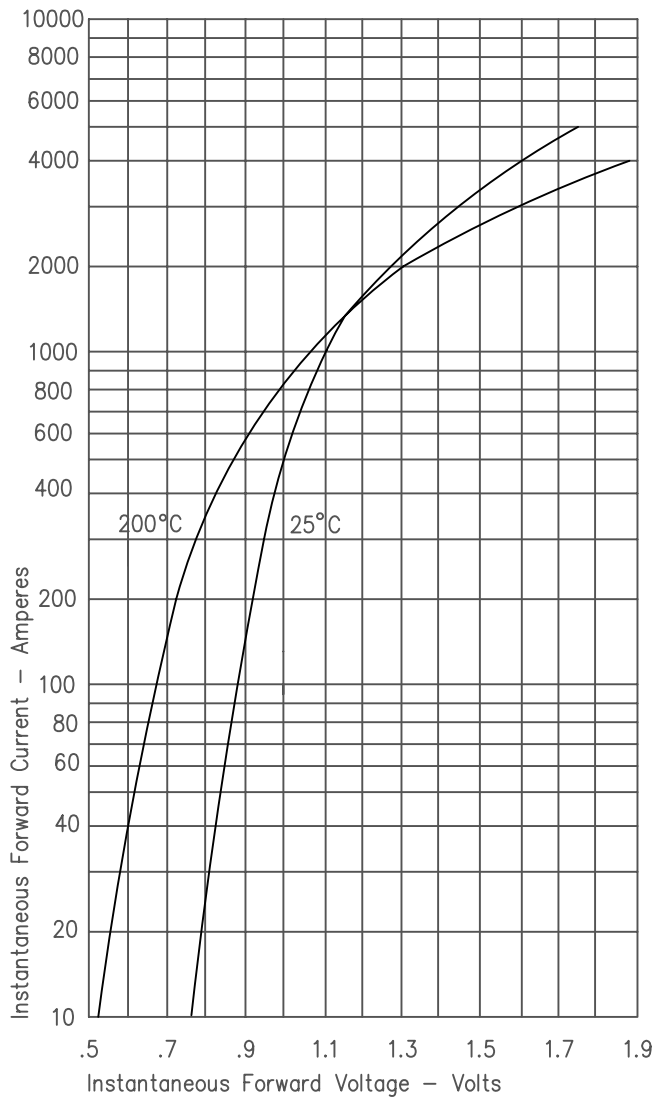


Figure 3
Forward Current Derating

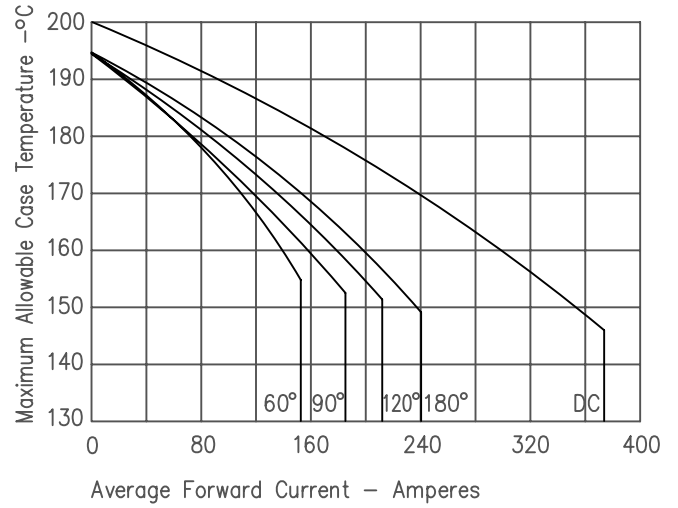


Figure 4
Maximum Forward Power Dissipation

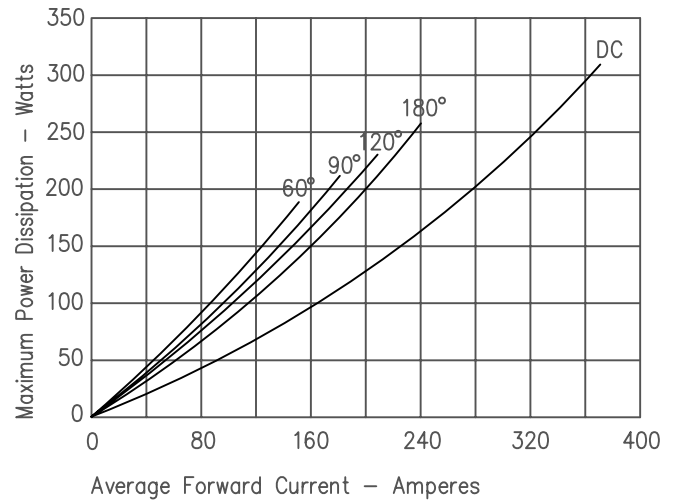


Figure 2
Typical Reverse Characteristics

