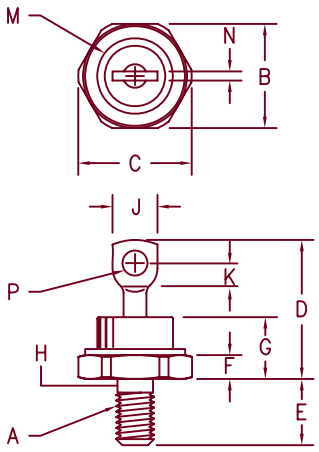
Silicon Power Rectifier

S/R35



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		
	Minimum	Maximum	Minimum	Maximum	Notes
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

Microsemi Catalog Number	JEDEC types				Peak Reverse Voltage
	1N2128,A	1N2458			50V
	1N2129,A	1N2459			100V
	1N2130,A	1N2460			150V
S3520	1N2131,A	1N2461	1N2788	1N3968 1N4136	200V
	1N2132,A	1N2462			250V
	1N2133,A	1N2463			300V
	1N2134,A	1N2464			350V
S3540	1N2135,A	1N2465	1N2789	1N3969 1N4137	400V
	1N2136,A				450V
	1N2137,A	1N2466			500V
S3560	1N2138,A	1N2467		1N3970 1N4138	600V
		1N2468			700V
S3580		1N2469		1N3971	800V
S35100					1000V
S35120					1200V
S35140					1400V
S35160					1600V

For Reverse Polarity change S to R
For JEDEC parts add R suffix for Reverse Polarity

DO203AB (D05)

- Low Forward Voltage
- Glass to Metal Seal Construction
- Glass Passivated Die
- V_{RRM} to 1600V
- 1050 Amps Surge Rating

Electrical Characteristics

Average forward current	$I_{F(AV)}$ 70 Amps	T_C = 152°C, Half Sine Wave, $R_{\theta JC}$ = 0.65°C/W
Maximum surge current	I_{FSM} 1050 Amps	8.3ms, half sine, T_J = 200°C
Max I^2t for fusing	I^2t 4500 A^2s	
Max peak forward voltage	V_{FM} 1.25 Volts	I_{FM} = 200A: T_J = 25°C*
Max peak reverse current	I_{RM} 25 µA	V_{RRM}, T_J = 25°C
Max peak reverse current	I_{RM} 2.5 mA	V_{RRM}, T_J = 150°C
Max Recommended Operating Frequency	10kHz	

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	–65°C to 200°C
Operating junction temp range	T_J	–65°C to 200°C
Maximum thermal resistance	$R_{\theta JC}$	0.65°C/W Junction to Case
Mounting torque		25–30 inch pounds
Weight		.5 ounces (14 grams) typical

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Figure 1
Typical Forward Characteristics

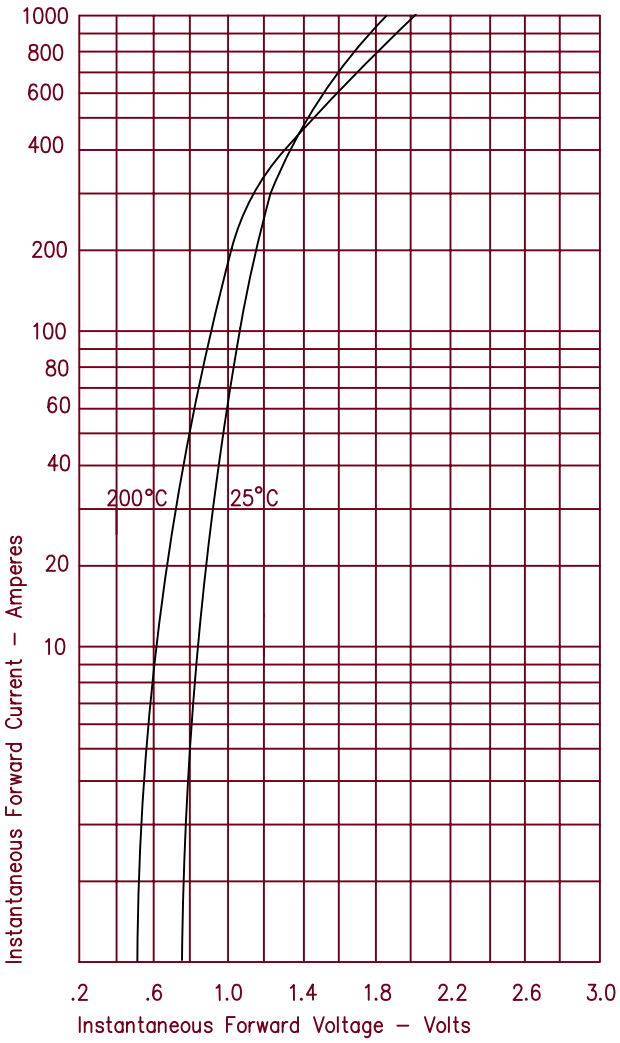


Figure 2
Typical Reverse Characteristics

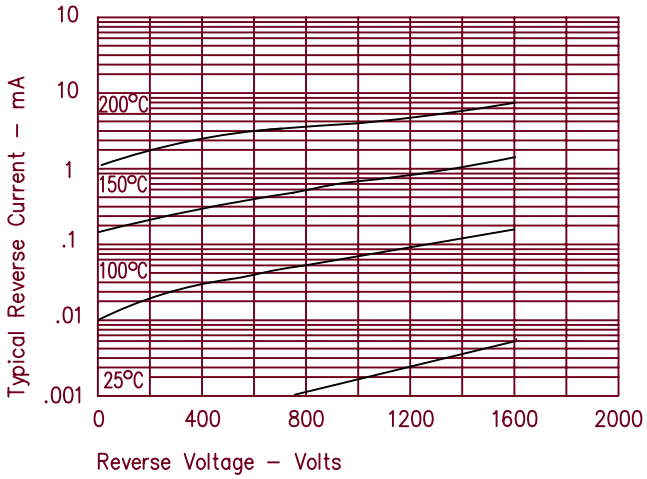


Figure 3
Forward Current Derating

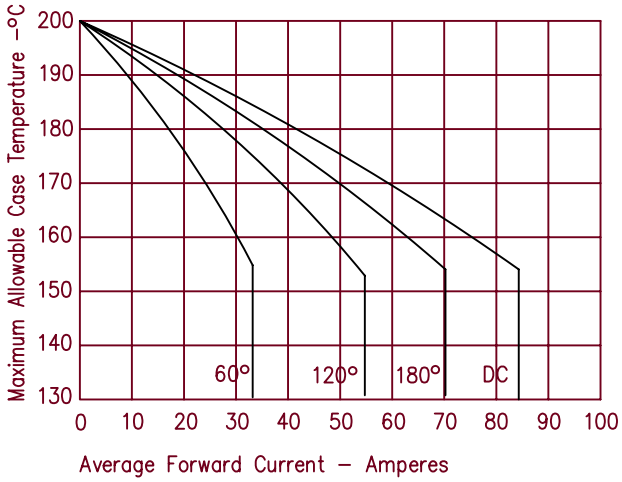


Figure 4
Maximum Forward Power Dissipation

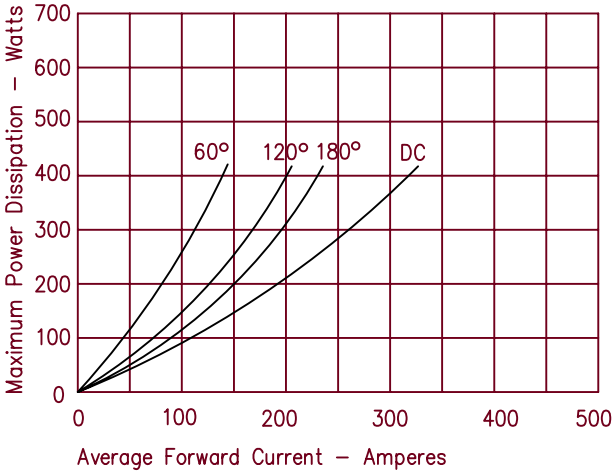
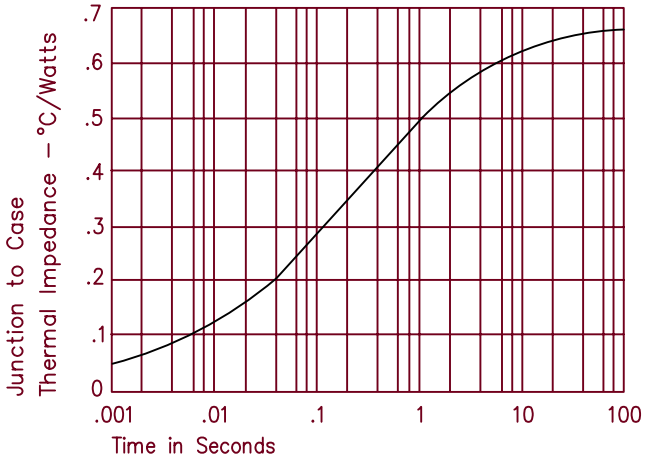


Figure 5
Transient Thermal Impedance



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