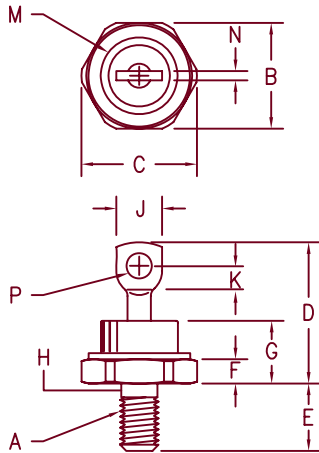


Silicon Power Rectifier S/R37 Series



- Notes:
1. 1/4-28 3A
 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

D0203AB (D05)

Microsemi Catalog Number Standard Reverse	Peak Reverse Voltage
S3720 R3720	200V
S3740 R3740	400V
S3760 R3760	600V
S3780 R3780	800V
S37100 R37100	1000V
S37120 R37120	1200V
S37140 R37140	1400V
S37160 R37160	1600V

- Glass Passivated Die
- 1500 Amps Surge Rating
- Glass to metal seal construction
- VRRM to 1600V
- Excellent reliability

Electrical Characteristics

Average forward current	IF(AV) 85 Amps	TC = 147°C, Half Sine Wave, R θJC = 0.6°C/W
Maximum surge current	IFSM 1500 Amps	8.3ms, half sine, TJ = 200°C
Max I ² t for fusing	I ² t 9300 A ² s	
Max peak forward voltage	VFM 1.15 Volts	IFM = 200A: TJ = 25°C*
Max peak reverse current	IRM 25 μA	VRRM, TJ = 25°C
Max peak reverse current	IRM 2.0 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	0.6°C/W junction to case
Typical thermal resistance (greased)	RθCS	0.5°C/W case to sink
Mounting torque		25-30 inch pounds
Weight		.6 ounces (17 grams) typical



6 Lake Street
Lawrence, MA 01841
PH: (978) 620-2600
FAX: (978) 689-0803
www.microsemi.com

05-02-07 Rev. 3

S/R37

Figure 1
Typical Forward Characteristics

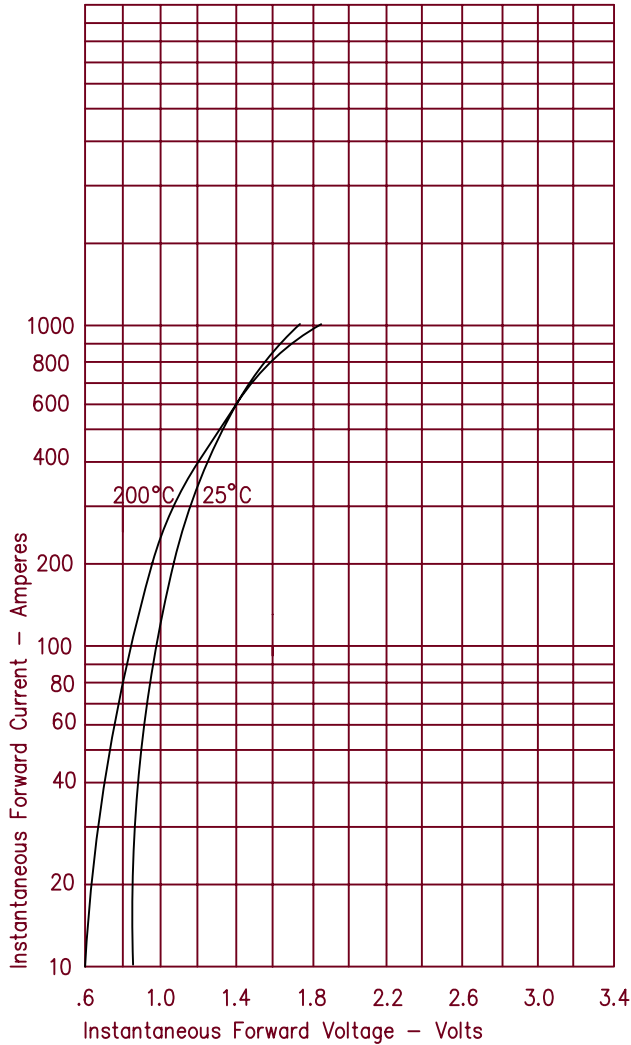


Figure 3
Forward Current Derating

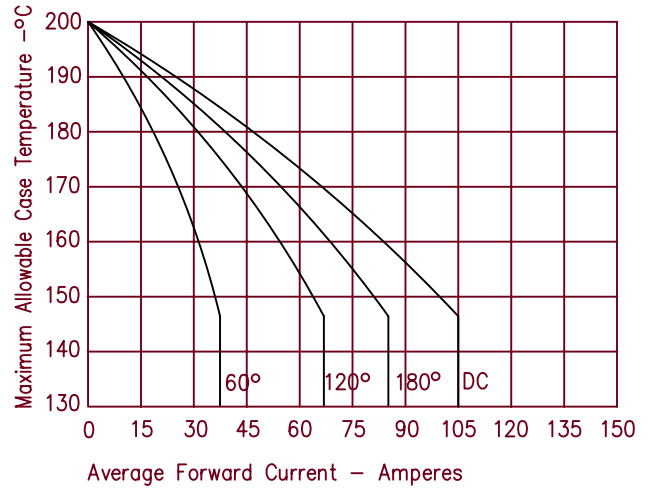


Figure 4
Maximum Forward Power Dissipation

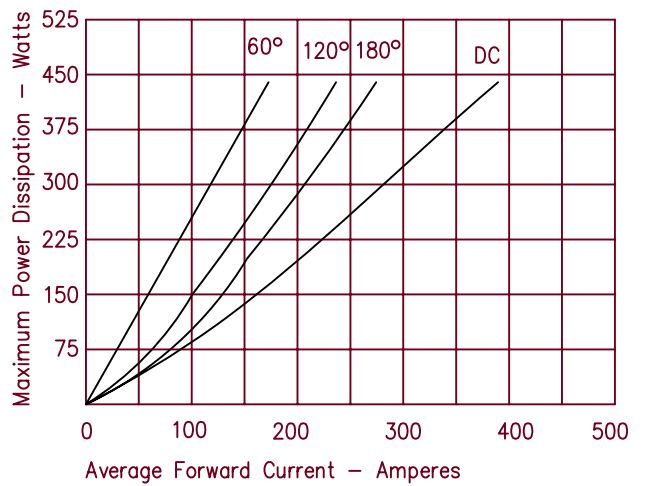


Figure 2
Typical Reverse Characteristics

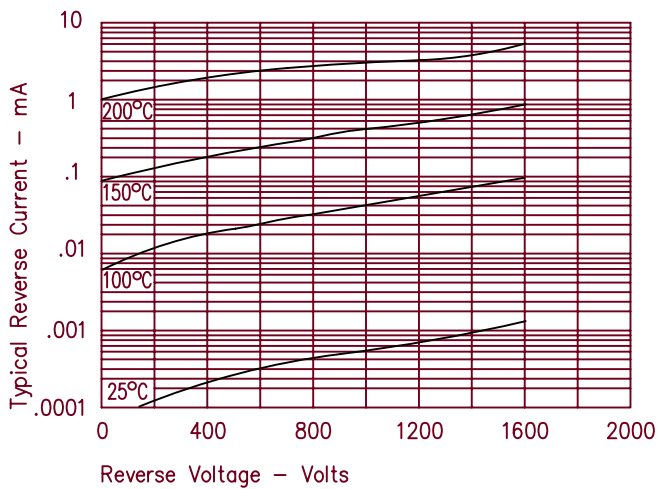


Figure 5
Transient Thermal Impedance

