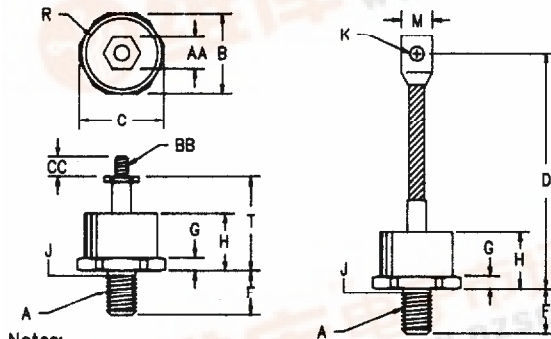


Silicon Power Rectifier S/R43 Series



- Notes:
1. 3/8-24 UNF-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	1.050	1.060	26.67	26.92	
C	---	1.166	---	29.61	
D	4.30	4.70	109.22	119.38	
F	.610	.640	15.49	16.25	
G	.213	.233	5.41	5.66	
H	---	.745	---	18.92	
J	.344	.373	8.74	9.47	2
K	.276	.286	7.01	7.26	
M	.465	.515	11.81	13.08	
R	---	.850	---	21.59	Dia
T	1.426	---	36.22	---	
AA	.427	.437	10.84	11.09	
BB	---	---	---	---	3
CC	.407	---	10.33	---	

D0205AA (D08)

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Microsemi Catalog Number	JEDEC Numbers	Peak Reverse Voltage
*S4310	1N412B, 1N3288A	100V
*S4320	1N3289A	200V
*S4330	1N3290A	300V
*S4340	1N3291A	400V
*S4350	1N3292A	500V
*S4360	1N3293A	600V
*S4380	1N3294A	800V
*S43100	1N3295A	1000V
*S43120	1N3296A	1200V
*S43140	1N3297A	1400V
*S43160	1N3298A	1600V

*Change S to R in part number for Reverse Polarity
Add the suffix TS to the end of the part number if a Top Stud is desired

- Soft recovery
- Glass Passivated Die
- 2500 Amps Surge Rating
- Glass to metal construction
- VRRM to 1600V
- Excellent reliability

Electrical Characteristics

Average forward current	IF(AV) 150 Amps	TC = 148°C, Half Sine Wave, RθJC = 0.35°C/W
Maximum surge current	IFSM 2500 Amps	8.3ms, half sine, TJ = 200°C
Max I ² t for fusing	I ² t 26000 A ² s	
Max peak forward voltage	VFM 1.1 Volts	IFM = 200A; TJ = 25°C*
Max peak reverse current	IRM 200 μA	VRRM, TJ = 25°C
Max peak reverse current	IRM 5.0 mA	VRRM, TJ = 150°C
Max Recommended Operating Frequency	7.5kHz	

*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	0.35°C/W Junction to Case
Typical thermal resistance	RθJC	0.28°C/W Junction to Case
Mounting torque		100 inch pounds maximum
Weight		2.75 ounces (78 grams) typical

S/R43

Figure 1
Typical Forward Characteristics

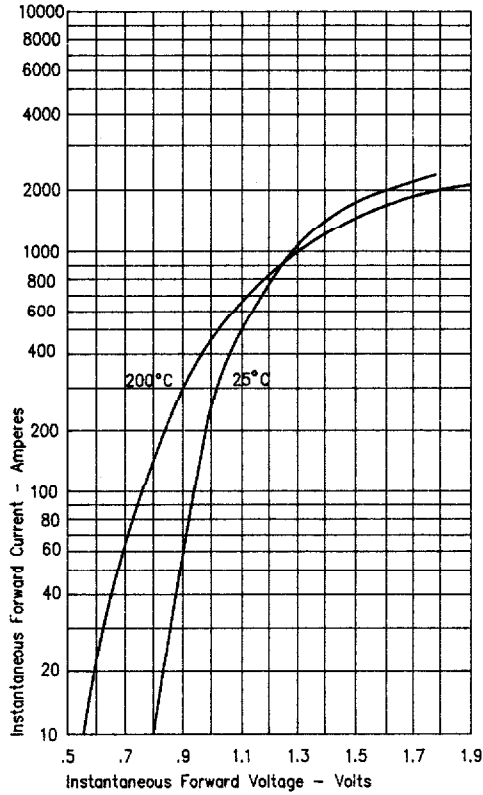


Figure 3
Forward Current Derating

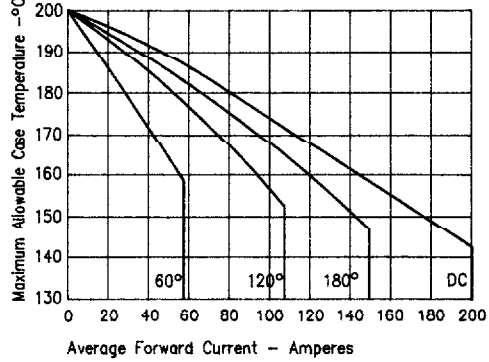


Figure 4
Maximum Forward Power Dissipation

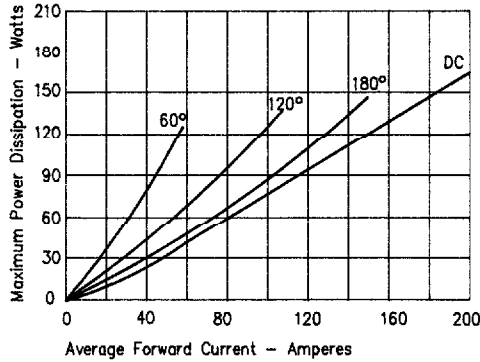


Figure 2
Typical Reverse Characteristics

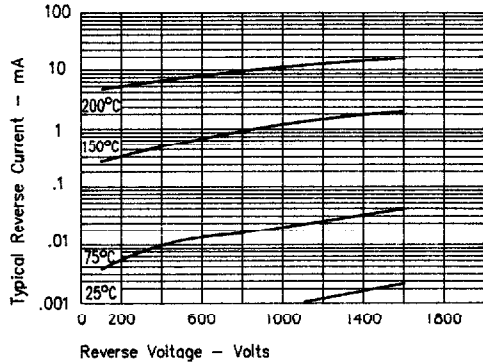
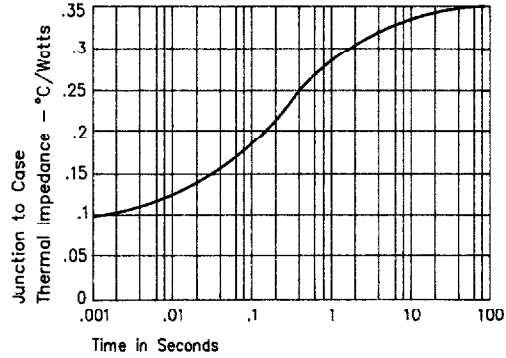
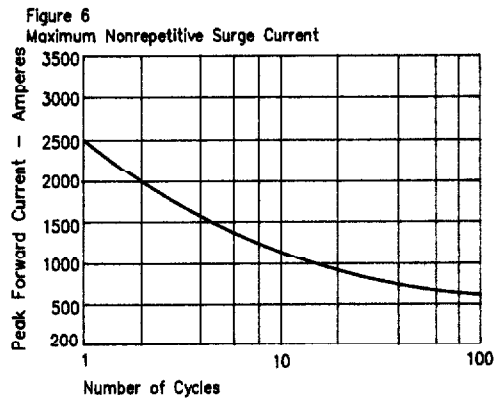


Figure 5
Transient Thermal Impedance



S/R43

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