

**BBC**  
BROWN BOVERIBROWN, BOVERI & CIE  
AKTIENGESELLSCHAFT  
MANNHEIMGeschäftsbereich  
Halbleiter und Stromrichter  
Telefon (06206) 503-1, Telex 04-65727  
Postfach 200, D-6840 LampertheimBrochure Order No.  
D HS 60624/9 E**FMC****Silicon  
Power Rectifiers**Series 43  
150 Amperes Average**Data and Diagrams are related to 60 cycles**

Catalog Number		equivalent to	Peak
Polarity		JEDEC	Reverse
Standard	Reverse	Numbers	Voltage
S4310	R4310	1N3288A, 1N4587	100
S4320	R4320	1N3289A, 1N4588	200
S4330	R4330	1N3290A, 1N4589	300
S4340	R4340	1N3291A, 1N4590	400
S4360	R4360	1N3293A, 1N4592	600
S4380	R4380	1N3294A, 1N4593	800
S43100	R43100	1N3295A, 1N4594	1000
S43120	R43120	1N3296A, 1N4595	1200

**Electrical Characteristics**

Maximum Average Forward Current, Single-Phase, Half-Wave DC Rating at 125°C Case Temperature	150 Amps.
Maximum Surge Current (one cycle of 60 Hz sine wave)	2100 Amps.
Peak Forward Voltage at 200 Amperes (25°C Case Temperature)	1.1 Volts*Max.
Rated Peak Reverse Voltage Range	100 to 1200 Volts
Maximum Peak Reverse Current at 150°C Case Temperature	5.0 MA
Maximum Operating Frequency	7,500 Hz
Maximum I <sup>2</sup> t (less than 8 ms)	18,200 Amps. <sup>2</sup> Sec.
Reverse Power Rating	1.0 Joule

**Mechanical Characteristics**

Base	High-Strength Copper Stud and Base with a 3/8-24 UNF-2A thread for through mounting on a heat sink. Nickel plating produces low contact resistance and prevents corrosion.
Header	Glass to metal construction. Hermetically sealed to base.
Weight	Approximately 2.75 ounces (78 grams)
Mounting Position	May be mounted in any position
Mounting Torque	125 inch pounds maximum
Dimensions	In accordance with JEDEC DO-8 Outline

**Thermal Characteristics**

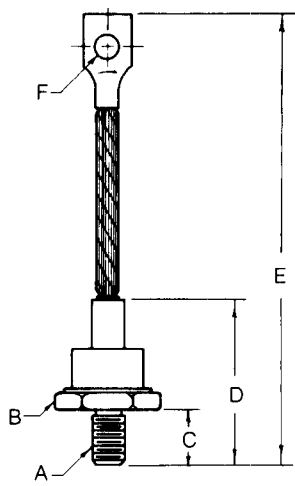
Storage Temperature Range	-65°C to +200°C
Operating Temperature Range Junction	-65°C to +190°C
Impedance (°C/W): Junction to Case	0.35 Max.

**Environmental Specifications**

Tests in accordance with (MIL-E-1)

Tests include: Temperature cycling, Salt spray, Vibration, Shock, Moisture resistance and Temperature soak.

PDF.Support



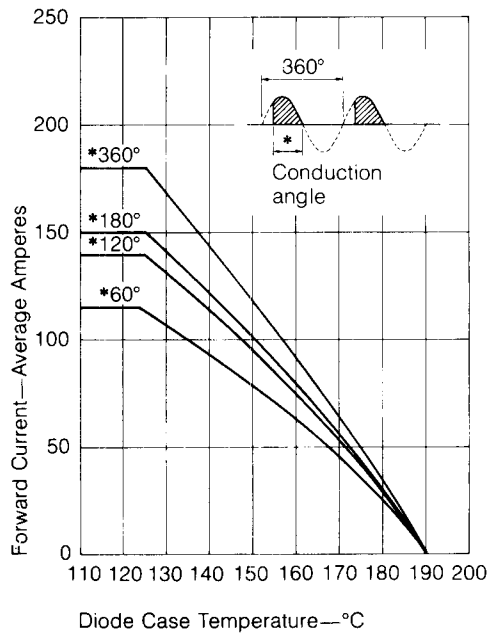
- ▼ Standard, cathode on stud
- ▲ Reverse, anode on stud

Dim	Inches		Millimeters		Notes
	Minimum	Maximum	Minimum	Maximum	
A					1
B	1.05	1.06	26.72	26.99	2
C	.61	.63	15.37	15.88	
D	1.99	2.13	50.55	53.98	
E	5.10	5.38	129.57	136.53	
F	.26	.28	6.63	7.14	Dia.

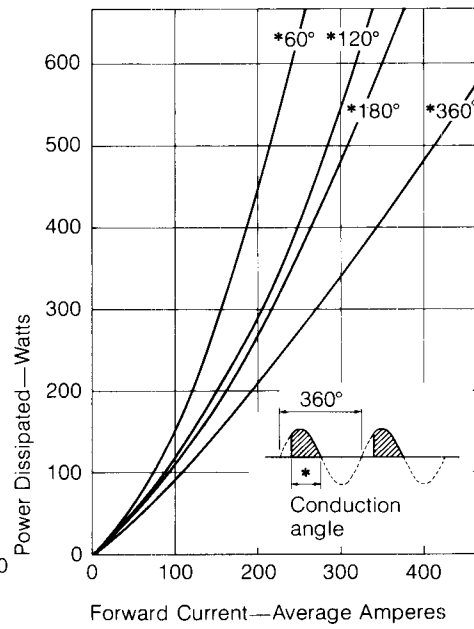
**Note 1:**  
3/8"-24 UNF-2A

**Note 2:**  
Hex. Across Flats

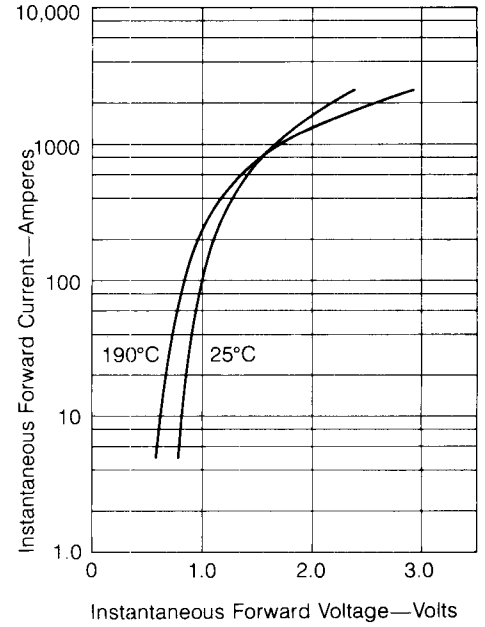
**Figure 1**  
Load current versus case temperature



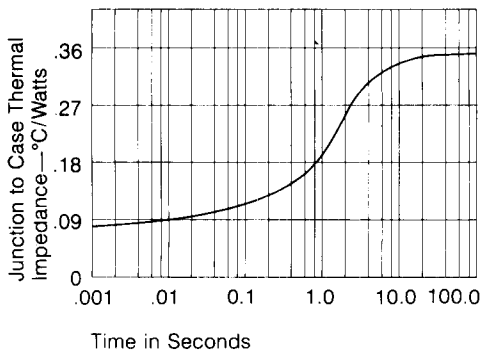
**Figure 2**  
Maximum power dissipation versus forward current



**Figure 3**  
Maximum forward characteristics



**Figure 4**  
Transient thermal impedance



**Figure 5**  
Maximum surge current at rated load

