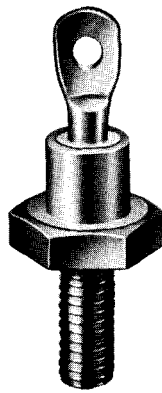


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Postfach 200, D-6840 LampertheimBrochure Order No.
D HS 60624/2 E**FMC****Silicon Avalanche
Power Rectifiers**Series 21
22 Amperes Average**Data and Diagrams are related to 60 cycles**

Catalog Number	Polarity	equivalent to JEDEC Numbers	Peak Reverse Voltage
S2110	R2110	1N1200, 1N1200A, 1N2248, 1N3616	100
S2120	R2120	1N1202, 1N1202A, 1N2250, 1N2784, 1N3618, 1N3964, 1N4506	200
S2130	R2130	1N1203, 1N1203A, 1N2252, 1N3619	300
S2140	R2140	1N1204, 1N1204A, 1N2254, 1N2785, 1N3620, 1N3965, 1N4507	400
S2160	R2160	1N1206, 1N1206A, 1N2258, 1N3622, 1N3966, 1N4508	600
S2180	R2180	1N2260, 1N3623, 1N3671, 1N3671A, 1N3967, 1N4509	800
S21100	R21100	1N2262, 1N3624, 1N3673, 1N3673A, 1N4510	1000

Electrical Characteristics

Maximum Average Forward Current, Single-Phase, Half-Wave DC Rating at 131°C Case Temperature	22 Amps.
Maximum Surge Current (one cycle of 60 Hz sine wave)	250 Amps.
Peak Forward Voltage at 30 Amperes (25°C Case Temperature)	1.2 Volts Max.
Rated Peak Reverse Voltage Range	100 to 1000 Volts
Maximum Peak Reverse Current at 150°C Case Temperature	1.0 MA
Maximum Operating Frequency	100 kHz
Maximum I ² t (less than 8 ms)	250 Amps. ² Sec.
Reverse Power Ratings	0.16 Joule

Mechanical Characteristics

Base	Steel stud and base with a #10-32 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 0.16 ounce (4.5 grams)
Mounting Position	May be mounted in any position
Mounting Torque	30 inch pounds maximum
Dimensions	In accordance with JEDEC DO-4 Outline

Thermal Characteristics

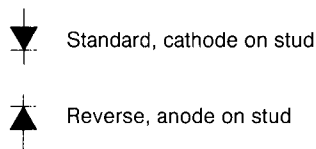
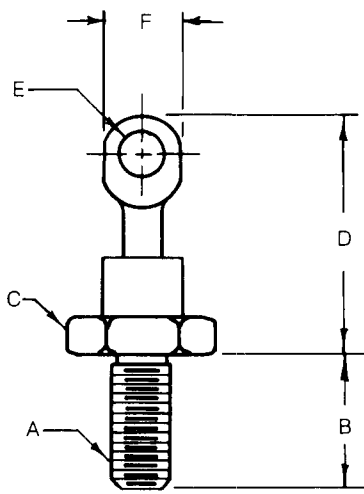
Storage Temperature Range	-60°C to +200°C
Operating Temperature Range Junction	-65°C to +190°C
Impedance (°C/W), Junction to Case	2.0 Max.

Environmental Specifications

Tests in accordance with (MIL-E-1)

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

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Dim.	Inches		Millimeters		Notes
	Minimum	Maximum	Minimum	Maximum	
A					1
B	.44	.47	11.11	11.89	
C	.42	.44	10.77	11.10	2
D	—	.72	—	18.26	
E	.09	—	1.52	—	
F	—	.20	—	5.16	

Note 1:
No. 10-32 UNF-2A

Note 2:
Hex. Across Flats

Figure 1
Load current versus case temperature

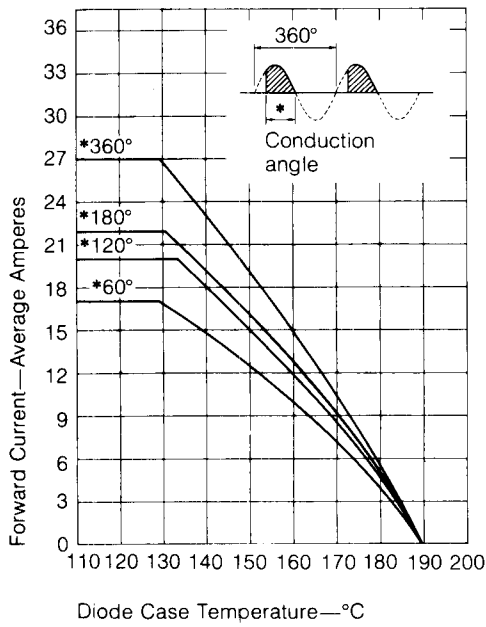


Figure 2
Maximum power dissipation versus forward current

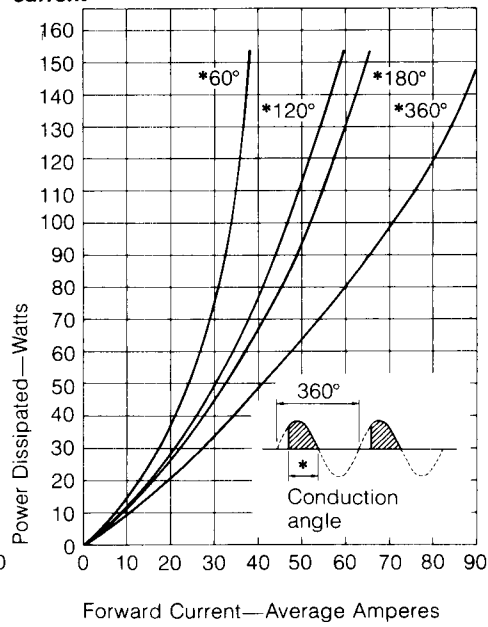


Figure 3
Maximum forward characteristics

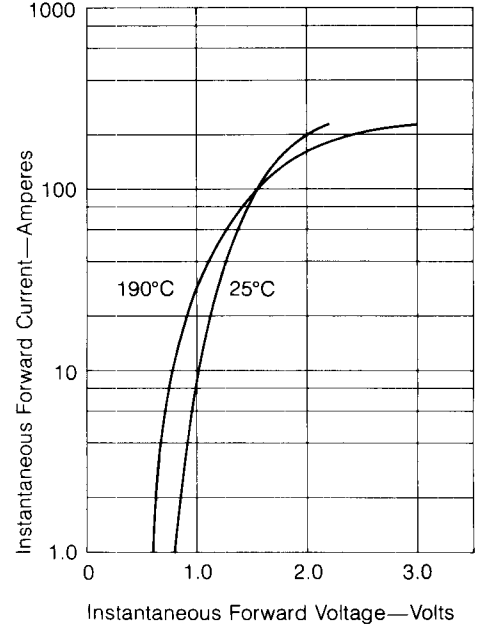


Figure 4
Transient thermal impedance

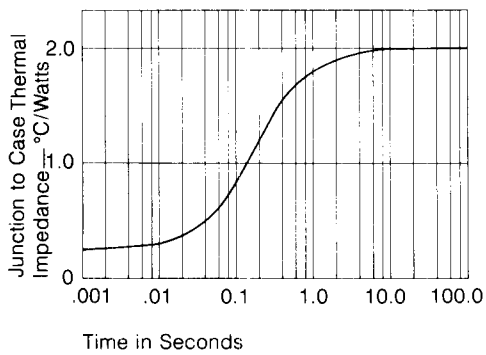


Figure 5
Maximum surge current at rated load

