

January 8, 1998

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### HIGH VOLTAGE, HIGH DENSITY, FAST RECOVERY MODULAR RECTIFIER ASSEMBLY

### QUICK REFERENCE DATA

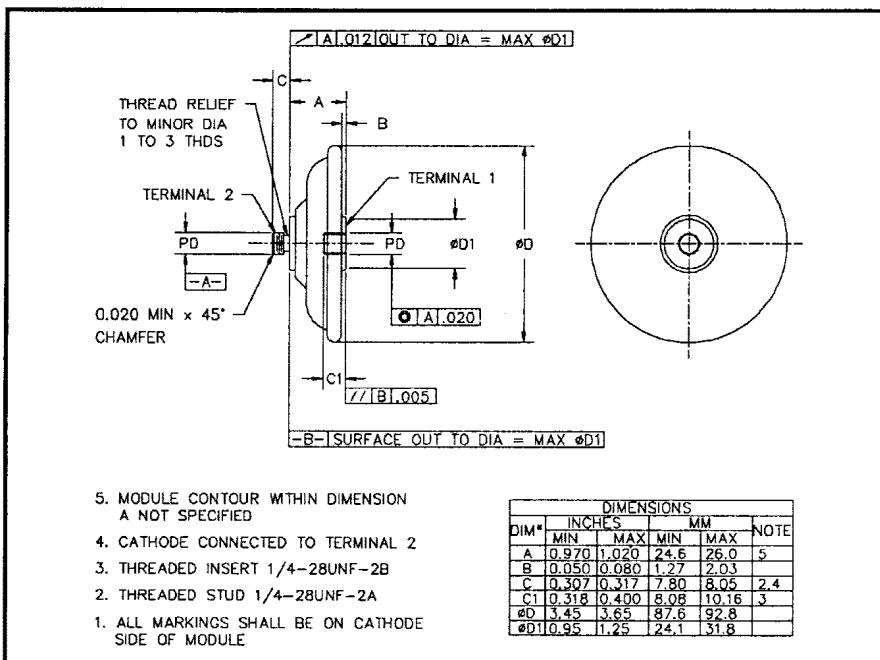
- Low reverse recovery time
- Low reverse leakage current
- High thermal shock resistance
- Modular construction
- Low distributed capacitance

- $V_R = 2500 - 7500V$
- $I_F = \text{to } 7.2A$
- $I_{FSM} = 150A$
- $t_{rr} = 300nS$

### ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage $V_{RWM}$	Rectified Current $I_{F(AV)}$			1 Cycle Surge Current $I_{FSM}$ $t_p = 8.3mS$ @ $T_{jMAX}$	$I^2t$ $t_p = 8.3mS$
		air 25 °C	air 100 °C	in still oil @ 55 °C		
		Volts	Amps	Amps		
S2HVS2.5F	2500	4.8	2.75	7.2	150	96
S2HVS5F	5000	3.8	2.1	5.8	150	96
S2HVS7.5F	7500	2.8	1.6	4.4	150	96

### MECHANICAL



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### ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R$ @ $V_{RWM}$		Maximum Reverse Recovery Time $t_{rr}$ @ 25°C	Maximum Forward Voltage $V_F$ @ 25°C @5A
	@ 25 °C	@ 100 °C		
	μA	μA	nS	Volts
S2HVS2.5F	2.0	20.0	300	3.9
S2HVS5F	2.0	20.0	300	6.5
S2HVS7.5F	2.0	20.0	300	10.4

1. Measured on discrete devices prior to assembly

Operating temperature range    -55 °C to +150 °C  
Storage temperature range        -55 °C to +150 °C

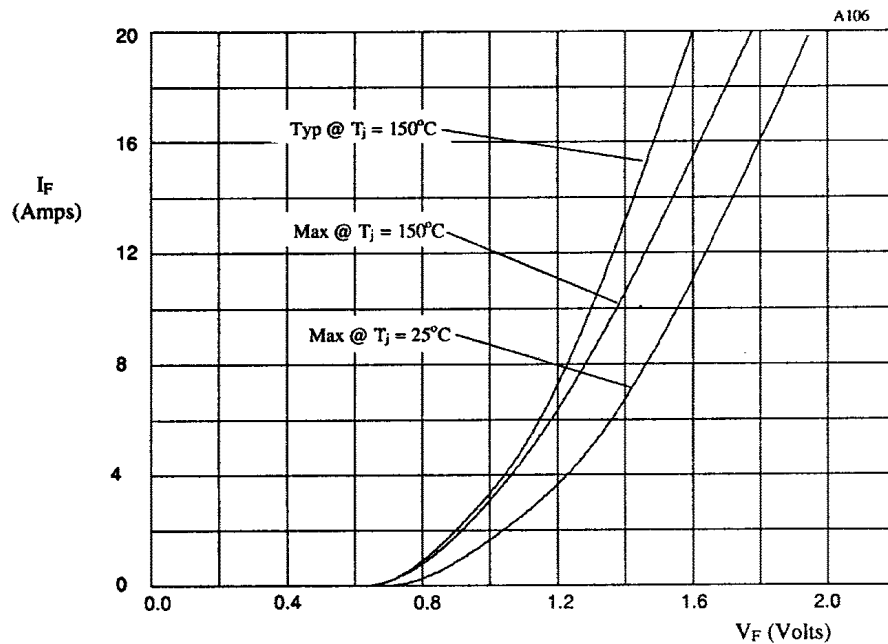


Figure 1. Forward voltage drop as a function of forward current (see TABLE 1).

TABLE 1

DEVICE	X-AXIS
S2HVS2.5F	x3
S2HVS5F	x5
S2HVS7.5F	x8