

SEMTECH

STANDARD RECOVERY HIGH VOLTAGE RECTIFIER ASSEMBLY

**S2HVS2.5
S2HVS5
S2HVS7.5**

January 9, 1998

TEL:805-498-2111 FAX:805-498-3804 WEB:http://www.semtech.com

HIGH VOLTAGE, HIGH DENSITY, STANDARD RECOVERY MODULAR RECTIFIER ASSEMBLY

QUICK REFERENCE DATA

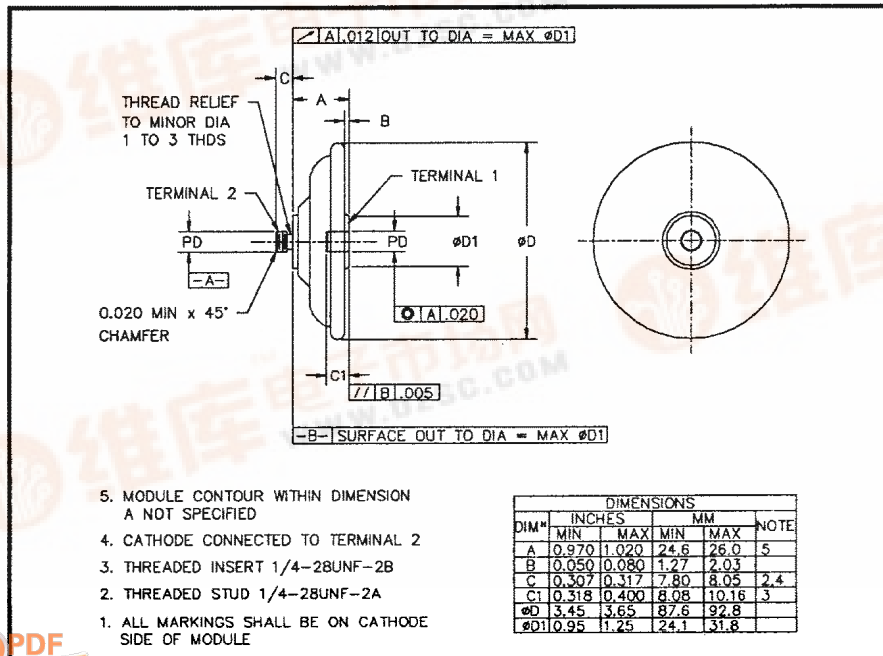
- Up to 15kV reverse voltage
- Modular construction
- Low reverse leakage current
- High thermal shock resistance
- Provides design versatility

- $V_R = 2.5kV - 7.5kV$
- $I_F = \text{to } 8.5A$
- $I_R = 2.0\mu A$
- $I_{FSM} = 200A$

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 $t_p = 8.3mS$ @ $25^\circ C$
		Air @ $25^\circ C$	Air @ $100^\circ C$	Still oil @ $55^\circ C$		
	Volts	Amps	Amps	Amps	Amps	A^2S
S2HVS2.5	2500	5.5	3.1	8.5	200	150
S2HVS5	5000	4.4	2.4	6.8	200	150
S2HVS7.5	7500	3.2	1.7	5.1	200	150

MECHANICAL



January 9, 1998

ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ 5.0A @ 25^\circ C$	Maximum Reverse Recovery Time ¹ $t_{rr} @ 25^\circ C$
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	μS
S2HVS2.5	2.0	20	3.5	5.0
S2HVS5	2.0	20	5.8	5.0
S2HVS7.5	2.0	20	9.2	5.0

1. Measured on discrete devices prior to assembly

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

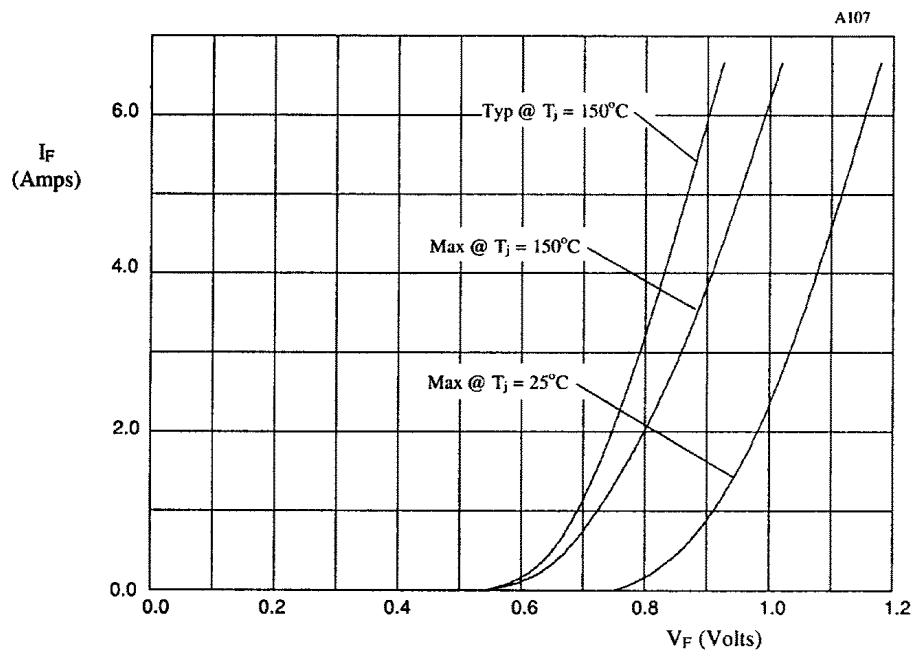


TABLE 1

DEVICE	X-axis
S2HVS2.5	x3
S2HVS5	x5
S2HVS7.5	x8

Figure 1. Forward voltage drop as a function of forward current for use with table 1.