

January 9, 1998

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

### QUICK REFERENCE DATA

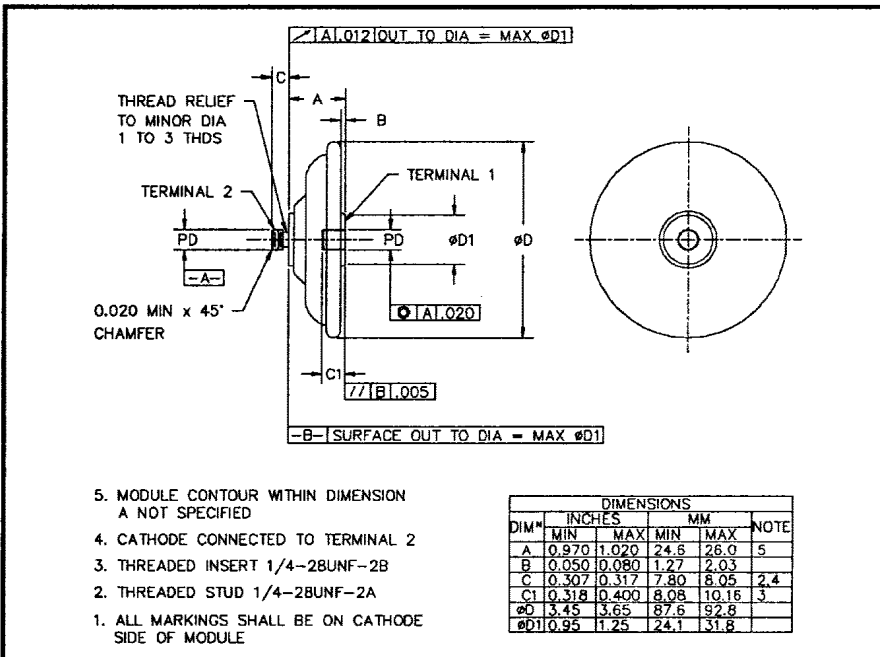
- Up to 15kV reverse voltage
- Modular construction
- Low reverse leakage current
- High thermal shock resistance
- Provides design versatility

- $V_R = 7.5kV - 10kV$
- $I_F = \text{to } 3.75A$
- $I_R = 1.0\mu A$
- $I_{FSM} = 50A$

### 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		
SHVS7.5	7500	2.4	1.3	3.75	100	37
SHVS10	10000	2.2	1.2	3.4	100	37

### MECHANICAL



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### ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current $I_R @ V_{RWM}$		Maximum Forward Voltage $V_F @ 3.0A @ 25^\circ C$	Maximum Reverse Recovery Time <sup>1</sup> $t_{rr} @ 25^\circ C$
	@ 25 °C	@ 100 °C		
	$\mu A$	$\mu A$	Volts	$\mu S$
SHVS7.5	1.0	10	9.2	5.0
SHVS10	1.0	10	11.5	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

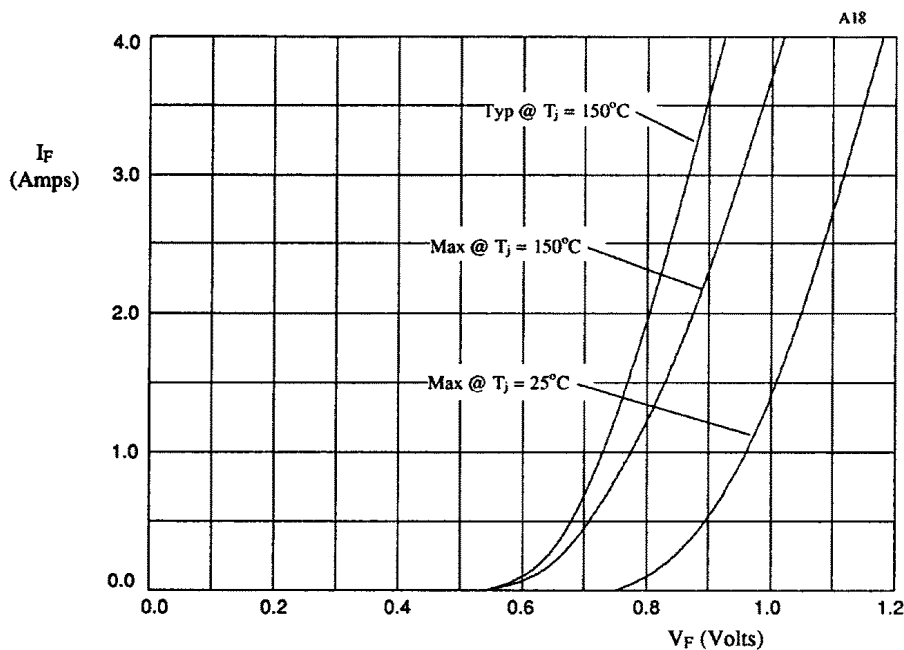


Figure 1. Forward voltage drop as a function of forward current for use with table 1.

TABLE 1

DEVICE	X-axis
SHVS7.5	x8
SHVS10	x10