



180 Lafayette Road
 North Hampton, NH 03862-2448
 PH: 603-964-3165
 FX: 603-964-3168
 WWW.PDEELECTRONICS.COM

High Voltage Rectifier Assembly

Fast Recovery
 SCF2500, SCF5000, SCF7500
 SCF10000, SCF12500

FEATURES

- Low Reverse Recovery Time
- Low Reverse Leakage Current
- High Thermal Shock Resistance
- Corona Free Construction
- Low Distributed Capacitance

QUICK REFERENCE DATA

- $V_R = 2500 \text{ VOLTS} - 12500 \text{ VOLTS}$
- $T_{rr} = 150 \text{ nSEC}$
- $I_F = .5 \text{ AMP}$
- $I_R = 1 \mu\text{AMP}$

ABSOLUTE MAXIMUM RATINGS

Device	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$ @ T_A		1 Cycle Surge Current $T_p=8.3mS$ I_{FSM} @ T_A		Repetitive Surge Current @ T_A	I^2T $T_p=8.3mS$ @ T_A	Case Length Max		
		Amps		Amps					Amps	A^2S
		55°C	100°C	25°C	100°C				25°C	25°C
SCF2500	2500	.5	.3	25	12.5	15	2.6	1.145		
SCF5000	5000	.5	.3	25	12.5	15	2.6	2.020		
SCF7500	7500	.5	.3	25	12.5	15	2.6	2.770		
SCF10000	10000	.5	.3	25	12.5	15	2.6	3.520		
SCF12500	12500	.5	.3	25	12.5	15	2.6	4.270		

ELECTRICAL CHARACTERISTICS

Device	Maximum Leakage Current Per Leg I_R @ V_{RWM}		Maximum Forward Voltage Per Leg V_F @ I_F		Maximum Reverse Recovery T_{RR}^*
	$T_C=25^\circ C$	$T_C=100^\circ C$	$T_C=25^\circ C$		$T_A=25^\circ C$
	μA	μA	Volts	Amps	nS
SCF2500	1.0	25	3.45	.5	150
SCF50000	1.0	25	5.75	.5	150
SCF75000	1.0	25	9.20	.5	150
SCF10000	1.0	25	11.5	.5	150
SCF12500	1.0	25	15.0	.5	150

* Measured on discretes prior to assembly in reverse recovery circuit switching from 0.5A forward to 1.0A reverse current recovering to 0.25A reverse current.

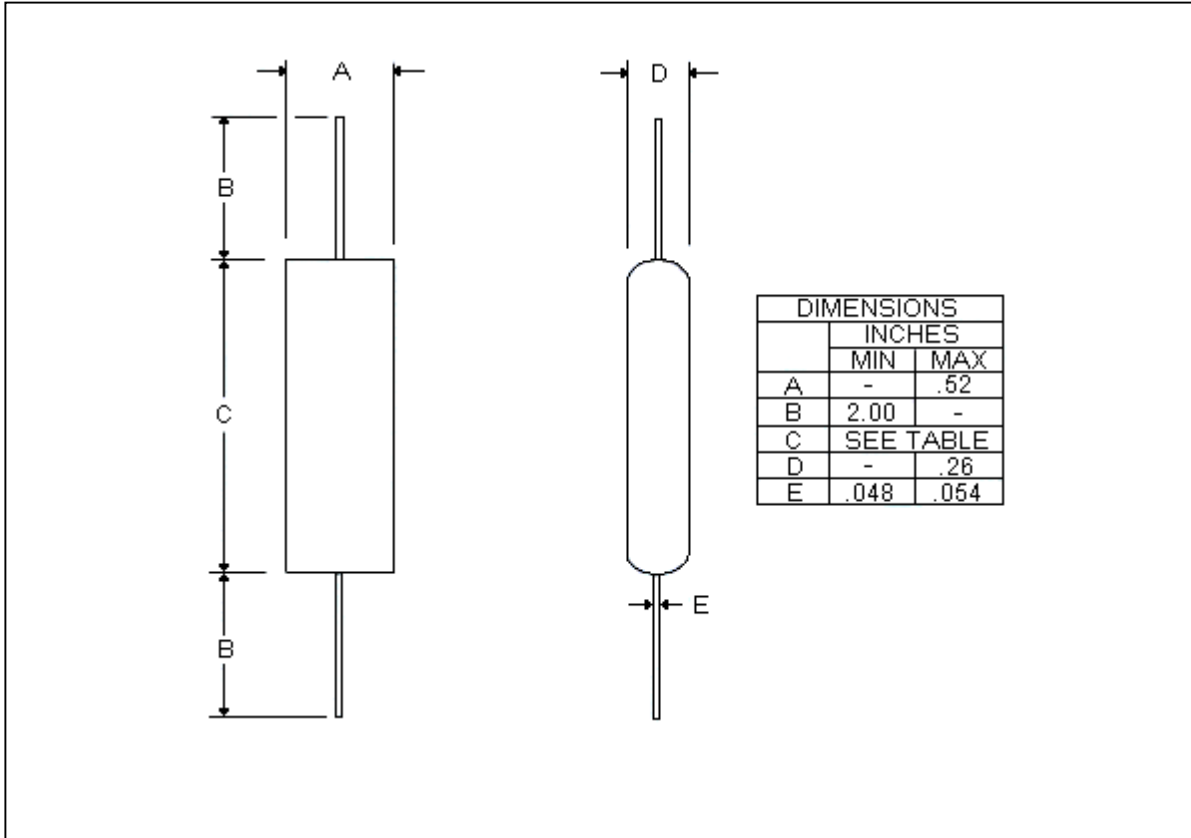


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MECHANICAL CHARACTERISTICS



THERMAL CHARACTERISTICS

Operating and Storage Temperature.....-55°C to +150°C