



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

SCFS2000, SCFS4000, SCFS6000  
 SCFS8000, SCFS10000, SCFS12000

### FEATURES

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

### QUICK REFERENCE DATA

- $V_R = 2000-12000V$
- $T_{rr} = 150nS$
- $I_F = 1.5A$
- $I_R = 5\mu A$

### 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
	Volts	Amps		Amps		Amps	$A^2S$	Dim C
		55°C	100°C	25°C	100°C	25°C	25°C	Inches
SCFS2000	2000	1.5	1.0	150	75	10	93	1.53
SCFS4000	4000	1.5	1.0	150	75	10	93	2.53
SCFS6000	6000	1.5	1.0	150	75	10	93	3.53
SCFS8000	8000	1.5	1.0	150	75	10	93	4.53
SCFS10000	10000	1.5	1.0	150	75	10	93	5.53
SCFS12000	12000	1.5	1.0	150	75	10	93	6.53

### ELECTRICAL CHARACTERISTICS

Device	Maximum Leakage Current Per Leg $I_R$ @ $V_{RWM}$		Maximum Forward Voltage Per Leg $V_F$ @ $I_F$		Maximum Reverse Recovery $T_{RR}^*$
	$T_C=25^\circ C$	$T_C=100^\circ C$	$T_C=25^\circ C$		$T_A=25^\circ C$
	$\mu A$	$\mu A$	Volts	Amps	nS
SCFS2000	5.0	25	5.4	3.0	150
SCFS4000	5.0	25	9.0	3.0	150
SCFS6000	5.0	25	12.6	3.0	150
SCFS8000	5.0	25	16.2	3.0	150
SCFS10000	5.0	25	19.8	3.0	150
SCFS12000	5.0	25	23.4	3.0	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.

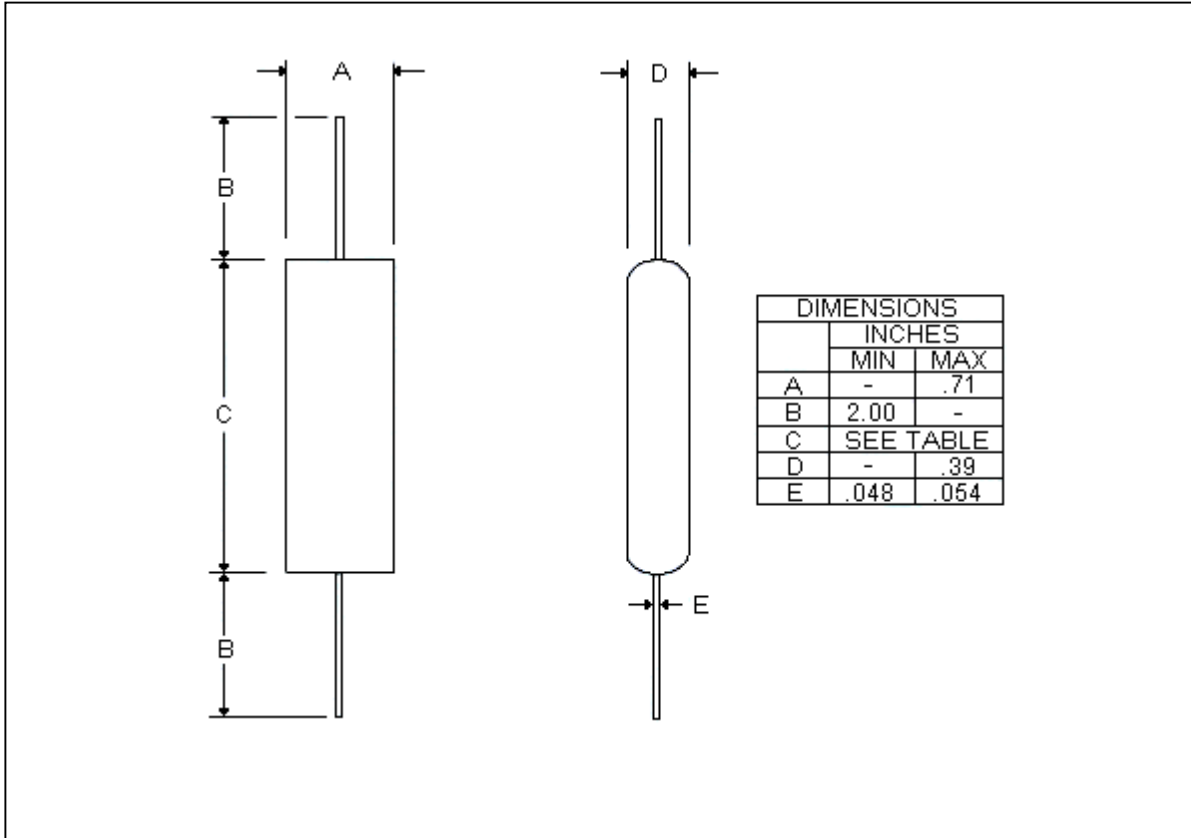


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### MECHANICAL CHARACTERISTICS



### THERMAL CHARACTERISTICS

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