

January 29, 1998

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HIGH VOLTAGE, HIGH CURRENT, HIGH DENSITY, STANDARD RECOVERY RECTIFIER ASSEMBLY

QUICK REFERENCE DATA

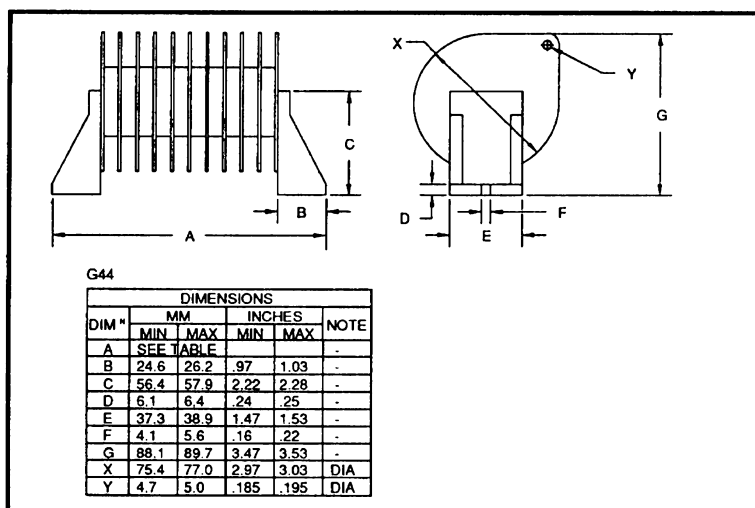
- 5.5A forward current and 30kV reverse voltage
- Air or oil enviroment
- High reverse surge current
- High thermal shock resistance
- Integral fins for easy cooling

- $V_R = 6kV - 30kV$
- $I_F = 5.50A$
- $I_R = 1.0\mu A$
- $I_{FSM} = 150A$

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$		1 Cycle Surge Current $t_p = 8.3mS$ I_{FSM}		Repetitive Surge Current I_{FRM}	I^2t $t_p = 8.3mS$	Body length
		air 55°C	air 100°C	@ 25 °C	@ 100 °C	@ 25 °C	@ 25 °C	dim A
	Volts	Amps	Amps	Amps	Amps	Amps	A ² S	inches
SCPHN6	6000	↑	↑	↑	↑	↑	↑	4.21
SCPHN10	10000	↑	↑	↑	↑	↑	↑	5.53
SCPHN16	16000	5.5	3.0	150	80	90	93.4	7.51
SCPHN20	20000	↓	↓	↓	↓	↓	↓	8.83
SCPHN26	26000	↓	↓	↓	↓	↓	↓	10.81
SCPHN30	30000	↓	↓	↓	↓	↓	↓	12.13

MECHANICAL



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CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current I_R @ V_{RWM}		Maximum Forward Voltage V_F @ 3.0A. @ 25°C	Maximum Reverse Recovery Time ¹ t_{rr} @ 25°C
	@ 25 °C	@ 100 °C		
	μA	μA	Volts	μS
SCPHN6	1.0	20	6.0	2.0
SCPHN10			10.0	
SCPHN16			16.0	
SCPHN20			20.0	
SCPHN26			26.0	
SCPHN30			30.0	

¹ Measured on discrete devices prior to assembly

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

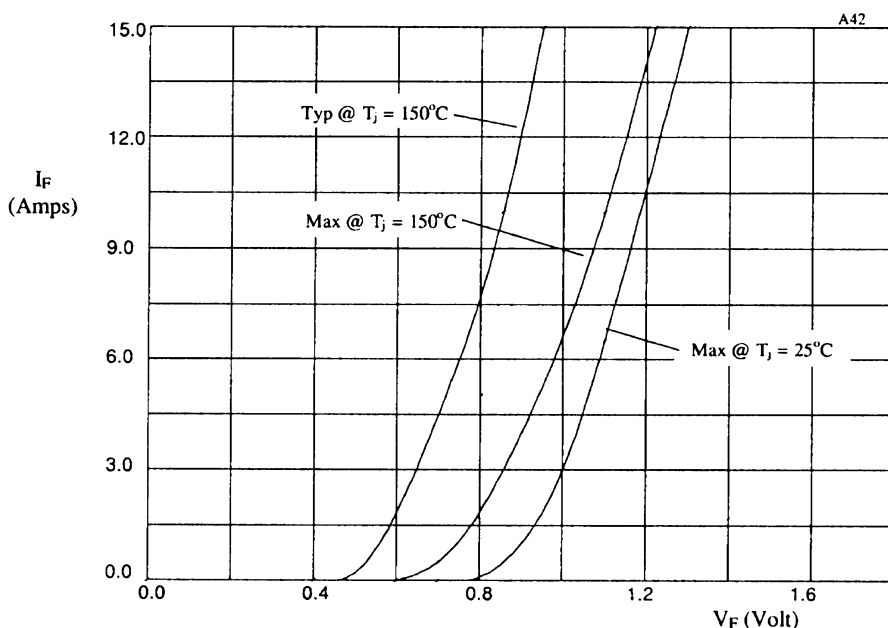


Figure 1. Forward voltage drop as a function of forward current for use with table 1.

TABLE 1

DEVICE	X-axis
SCPHN6	x6
SCPHN10	x10
SCPHN16	x16
SCPHN20	x20
SCPHN26	x26
SCPHN30	x30