January 8, 1998

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HIGH VOLTAGE, HIGH DENSITY, STANDARD RECOVERY LEADED SILICON RECTIFIER ASSEMBLY

- Low reverse leakage current
- Low forward voltage drop
- High thermal shock resistance
- Corona free construction
- Low distributed capacitance

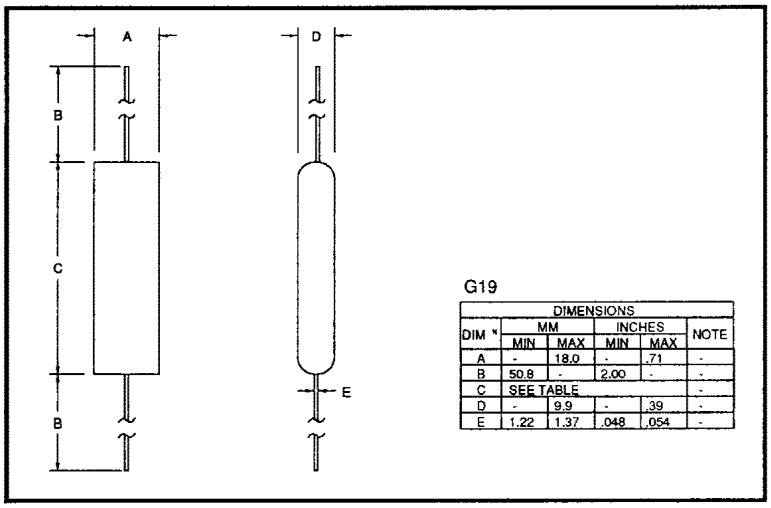
QUICK REFERENCE DATA

- V_R = 2500V - 15000V
- I_F = 2.0A
- I_R = 1.0 µA
- I_{FSM} = 80A

ABSOLUTE MAXIMUM RATINGS

Device Type	Working Reverse Voltage V_{RWM}	Average Rectified Current $I_{F(AV)}$				1 Cycle Surge Current I_{FSM} t_p = 8.3mS @ $T_{j\ MAX}$	I^2t t_p = 8.3mS @ $T_{j\ MAX}$	Repetitive Surge Current @ 25°C	Case Length dim. C Max
		@ 55 °C	@ 100 °C	Forced air 600CFM, 25°C	in still oil @ 55 °C				
	Volts	Amps	Amps	Amps	Amps	Amps	A^2S	Amps	Inches
SCHS2500	2500	2.0	1.2	2.0	4.0	80	26	31	1.53
SCHS5000	5000								2.53
SCHS7500	7500								3.53
SCHS10000	10000								4.53
SCHS12500	12500								5.53
SCHS15000	15000								6.53

MECHANICAL



G19

DIMENSIONS					
DIM "	MM		INCHES		NOTE
	MIN	MAX	MIN	MAX	
A	-	18.0	-	.71	-
B	50.8	-	2.00	-	-
C	SEE TABLE				-
D	-	9.9	-	.39	-
E	1.22	1.37	.048	.054	-

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ELECTRICAL CHARACTERISTICS

Device Type	Maximum Reverse Leakage Current I_R @ V_{RWM} @ 25 °C	Maximum Reverse Leakage Current I_R @ V_{RWM} @ 100 °C	Maximum Forward Voltages V_F @ 3.0A @ 25°C	Maximum Reverse Recovery Time [1] @ 25°C
	µA	µA	Volts	µS
SCHS2500	↑ 1.00 ↓	↑ 10.0 ↓	3.45	↑ 2.5 ↓
SCHS5000			5.75	
SCHS7500			9.20	
SCHS10000			11.50	
SCHS12500			14.95	
SCHS15000			18.40	

1. Measured on discrete devices prior to assembly.

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

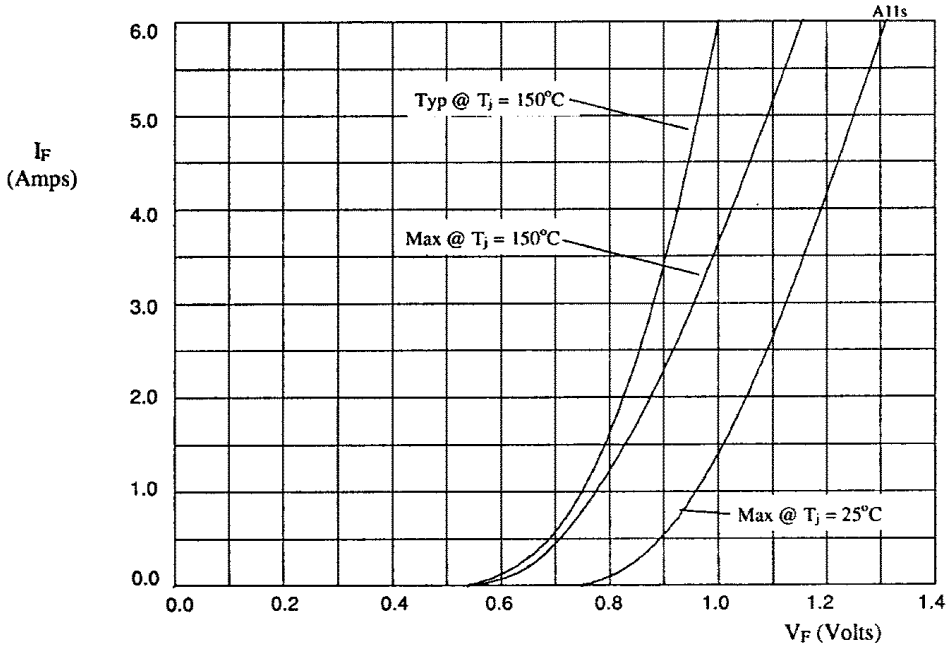


Figure 1. Forward voltage drop as a function of forward current.

TABLE 1

DEVICE	X-AXIS
SCHS2500	x3
SCHS5000	x6
SCHS7500	x8
SCHS10000	x10
SCHS12500	x13
SCHS15000	x16

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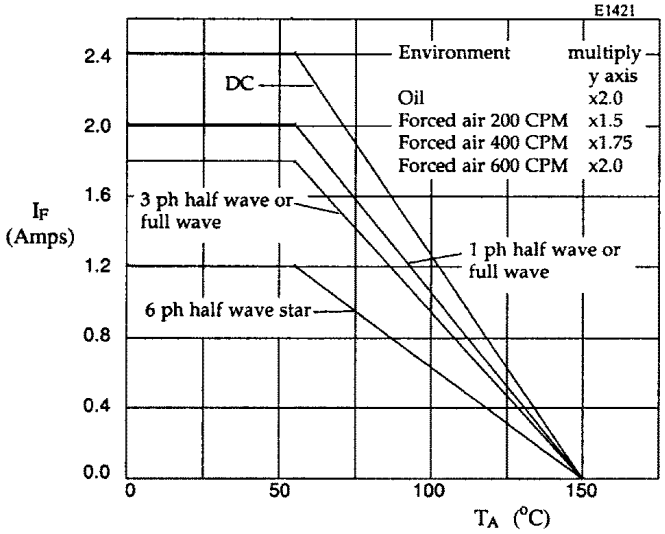


Figure 2. Maximum forward current against ambient temperature.

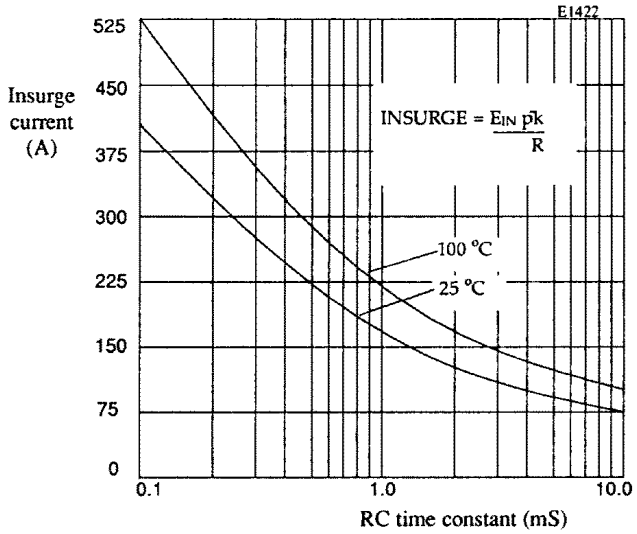


Figure 3. Maximum ratings for capacitive loads. Insurge current versus RC time constant

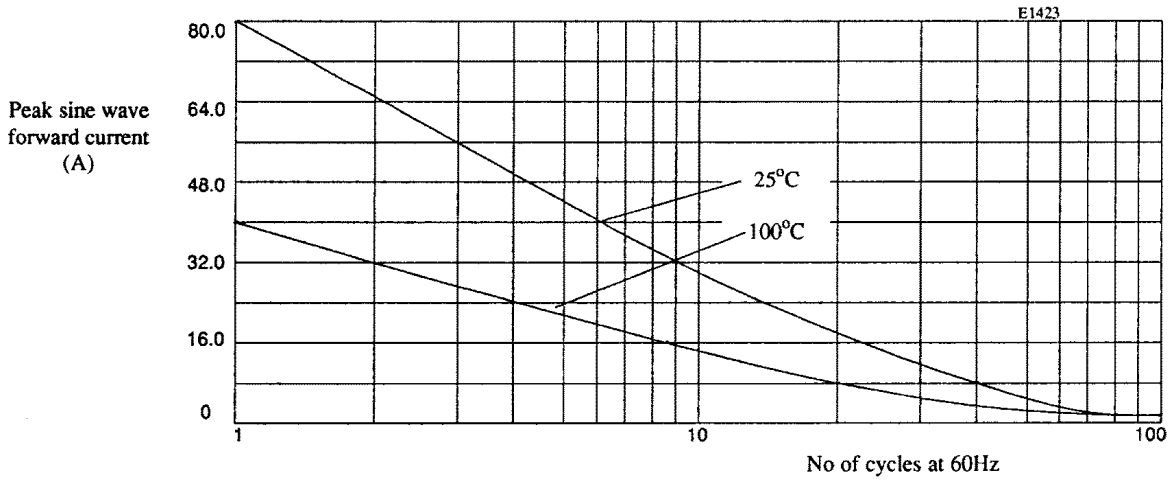


Figure 4. Non repetitive forward current surge curves.