

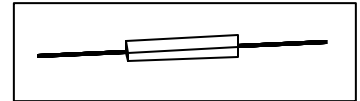
TECHNICAL DATA
DATA SHEET 543, REV. -

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

FEATURES:

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

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


Absolute Maximum Ratings

TYPE NUMBER	PEAK INVERSE VOLTAGE (PIV)	MAX. AVG. DC OUTPUT CURRENT $I_{F(AV)}$		FORCED AIR @ 600 CFM, 55°C	IN STILL OIL @ 55°C	1 CYCLE SURGE CURRENT I_{FSM} $t_p = 8.3ms$ @ T_{JMAX}	I^2t $t_p = 8.3ms$ @ T_{JMAX}	REPETITIVE SURGE CURRENT I_{FRM} @ 25°C	PACKAGE LENGTH
		55°C	100°C						
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

Electrical Characteristics

TYPE NUMBER	MAXIMUM REVERSE CURRENT @ PIV I_R		MAXIMUM PEAK FORWARD VOLTAGE V_F @ I_F		MAXIMUM REVERSE RECOVERY TIME ① t_{rr} @ 25°C
	$\mu Amps$		V	A	
	25°C	100°C			
SCHS2500	1.0	10	3.45	3.0	2.5
SCHS5000			5.75		
SCHS7500			9.20		
SCHS10000			11.50		
SCHS12500			14.95		
SCHS15000			18.40		

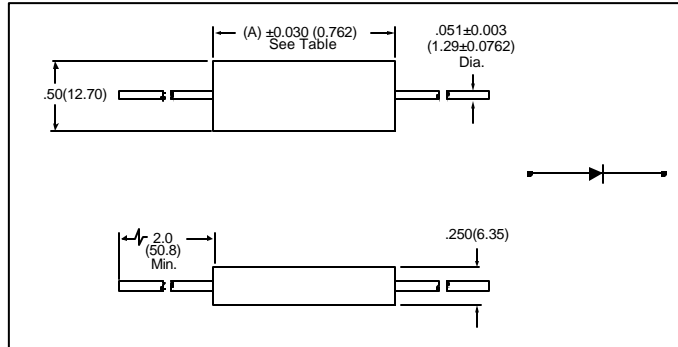
Notes:

- Operating temperature range -55 to +150°C.
- Storage temperature range -55 to +150°C.
- ① Measured on discrete devices prior to assembly.

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Mechanical Dimensions in: mm / inches



CHARACTERISTICS CURVES

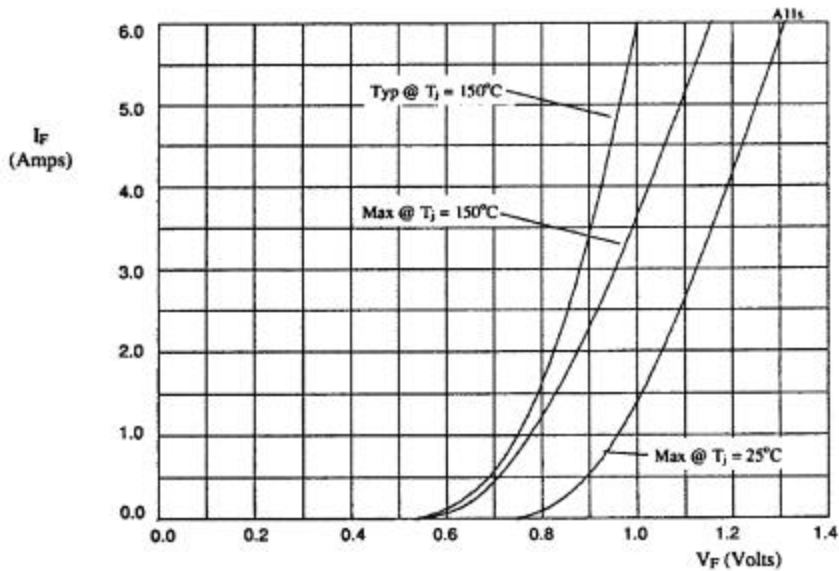


Figure 1. Forward voltage drop as a function of forward current.

TABLE I

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

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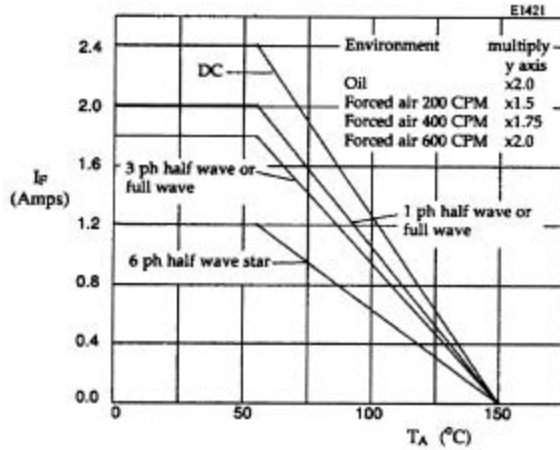


Figure 2. Maximum forward current against ambient temperature.

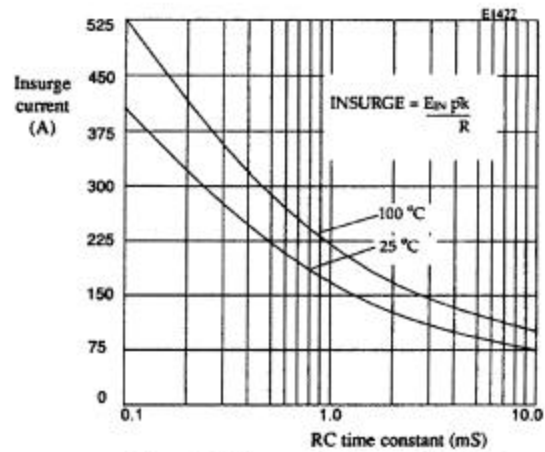


Figure 3. Maximum ratings for capacitive loads. Insurge current versus RC time constant

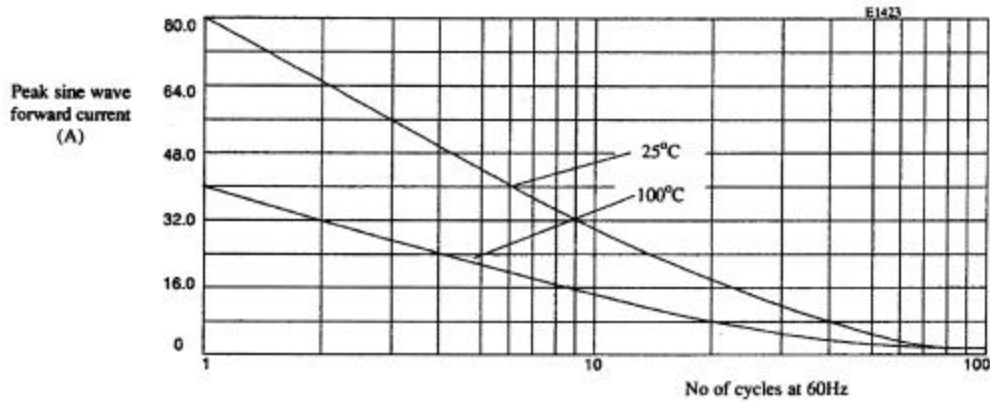


Figure 4. Non repetitive forward current surge curves.

TECHNICAL DATA

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