

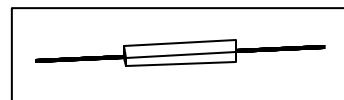
TECHNICAL DATA
DATA SHEET 541, REV. -

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

FEATURES:

- Low reverse recovery time
- Low reverse leakage current
- High thermal shock resistance
- Corona free construction
- Low distributed capacitance

- $V_R = 2000V - 12000V$
- $I_F = 1.5A$
- $I_R = 5.0mA$
- $t_{rr} = 150ns$



Absolute Maximum Ratings

TYPE NUMBER	PEAK INVERSE VOLTAGE (PIV)	MAX. AVG. DC OUTPUT CURRENT $I_{F(AV)}$		REPETITIVE SURGE CURRENT I_{FRM}	1 CYCLE SURGE CURRENT $t_p = 8.3ms$ (sine) I_{FSM}		I^2_t $t_p = 8.3ms$ @ 25°C	PACKAGE LENGTH
		Amps		Amps	Amps			
		Volts	55°C	100°C	25°C	25°C		
SCFS2000	2000							1.53
SCFS4000	4000							2.53
SCFS6000	6000	1.5	1.0	10	150	75	93	3.53
SCFS8000	8000							4.53
SCFS10000	10000							5.53
SCFS12000	12000							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
	μ Amps				
	25°C	100°C	V	A	nsec
SCFS2000	5.0	25	5.4	3.0	150
SCFS4000			9.0		
SCFS6000			12.6		
SCFS8000			16.2		
SCFS10000			19.8		
SCFS12000			23.4		

Notes:

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

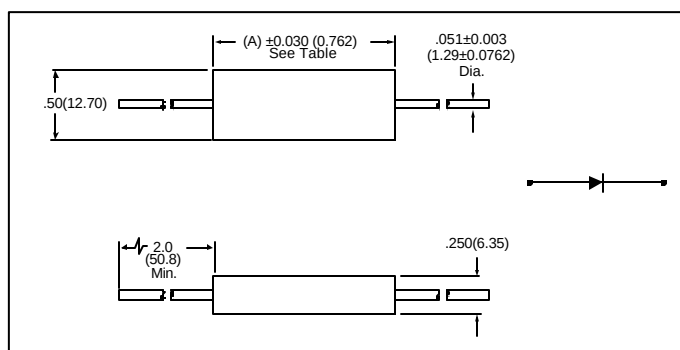
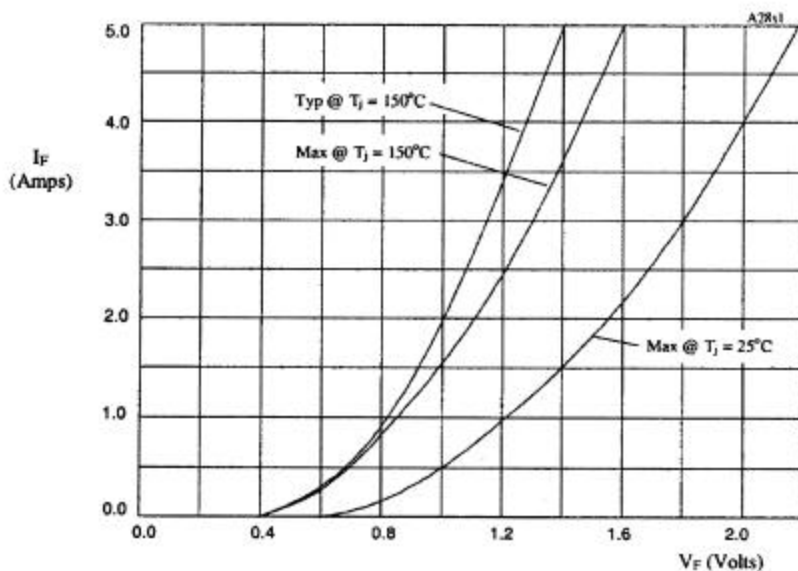
Mechanical Dimensions in: mm / inches**CHARACTERISTICS CURVES**

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

TABLE I

DEVICE	X-AXIS
SCFS2000	x3
SCFS4000	x5
SCFS6000	x7
SCFS8000	x9
SCFS10000	x11
SCFS12000	x13

SENSITRON

TECHNICAL DATA

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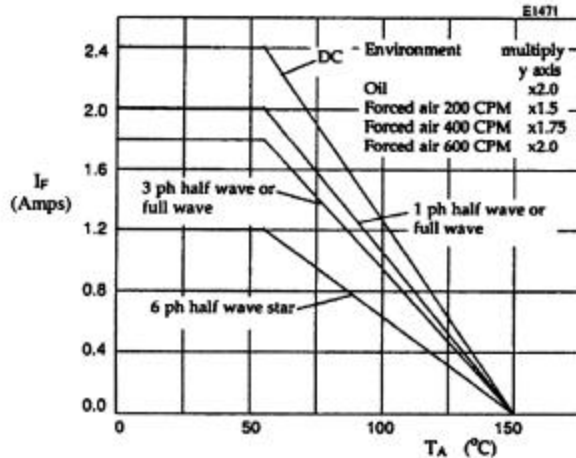


Figure 2. Maximum average forward currents against ambient temperature.

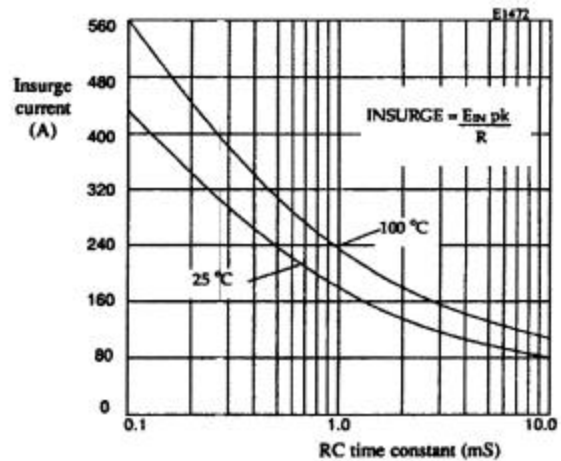


Figure 3. Maximum ratings for capacitive loads. Insurge current versus RC time constant

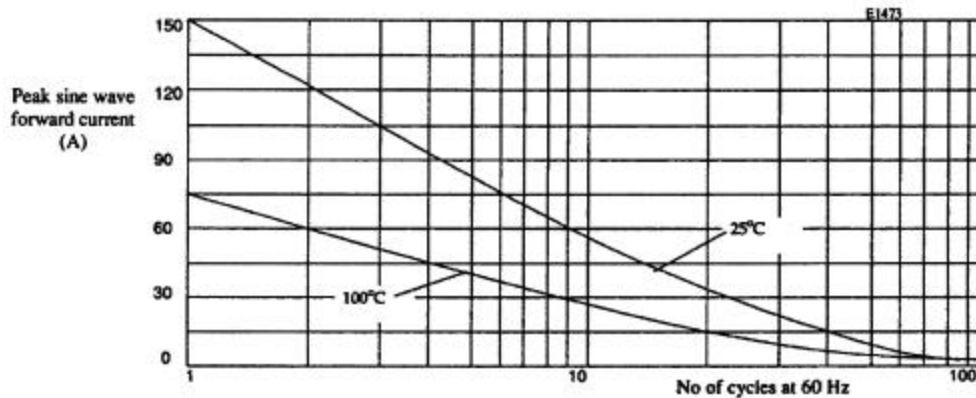


Figure 4. Non repetitive forward current surge curves for 25°C and 100°C