



**STANDARD RECOVERY DIODE STUD TYPES 85A**

**Features**

High Surge Capability  
Types up to 1600V  $V_{RRM}$

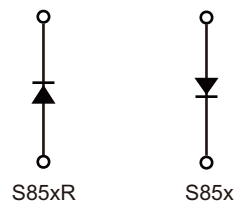
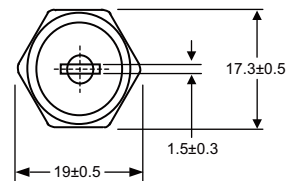
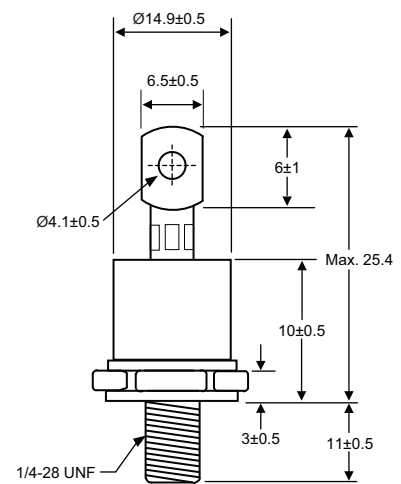
**Maximum Ratings**

Junction Operating Temperature : -55 °C to+175 °C  
Storage Temperature : -55 °C to+175 °C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
S85B(R)	100 V	70 V	100 V
S85D(R)	200 V	140 V	200 V
S85G(R)	400 V	280 V	400 V
S85J(R)	600 V	420 V	600 V
S85K(R)	800 V	560 V	800 V
S85M(R)	1000 V	700 V	1000 V
S85Q(R)	1200 V	840 V	1200 V
S85V(R)	1400 V	980 V	1400 V
S85Y(R)	1600 V	1120 V	1600 V



Dimensions in mm (1 mm = 0.0394")



Marking Notes :  
1. R= Stud Reverse Polarity : Anode to Stud  
2. None = Stud normal Polarity : Cathode to Stud

**Electrical Characteristics @ 25 °C Unless Otherwise Specified**

Average Forward Current (Per pkg)	$I_{F(AV)}$	85A	$T_C = 140^{\circ}C$
Peak Forward Surge Current	$I_{FSM}$	1500A	8.3ms , half sine
Maximum Instantaneous Forward Voltage*	$V_F$	1.1V	$I_{FM} = 85A;$ $T_J = 25^{\circ}C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*	$I_R$	10µA 12mA	$T_J = 25^{\circ}C$ $T_J = 175^{\circ}C$
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.50°C/W	
Mounting torque	Inch pounds (in-pb)	30	

\*Pulse Test: Pulse Width 300 µsec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

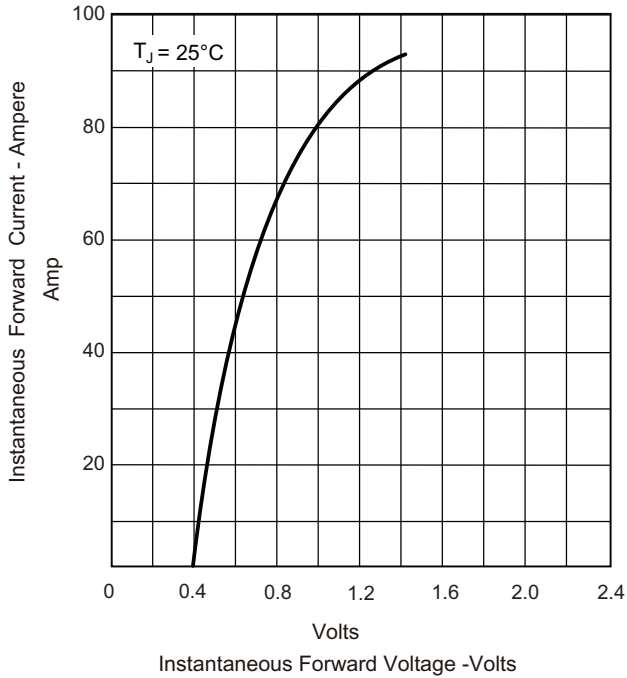


Figure .2-Forward Derating Curve

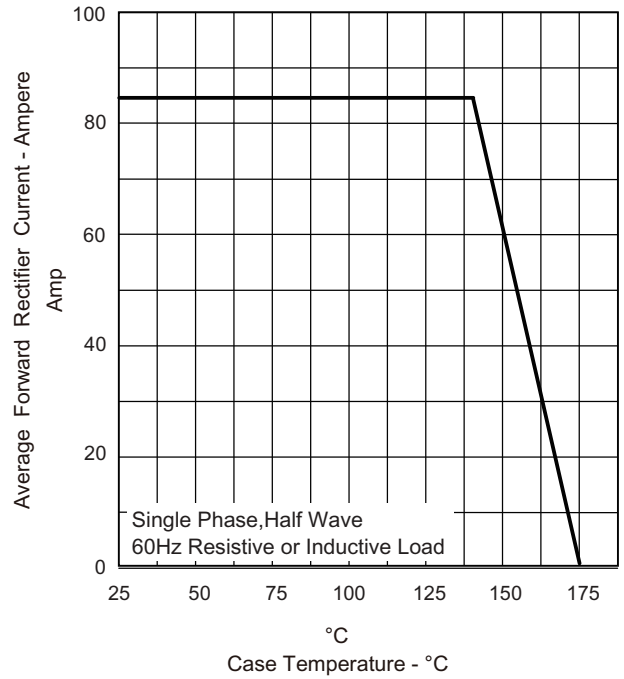


Figure .3- Peak Forward Surge Current

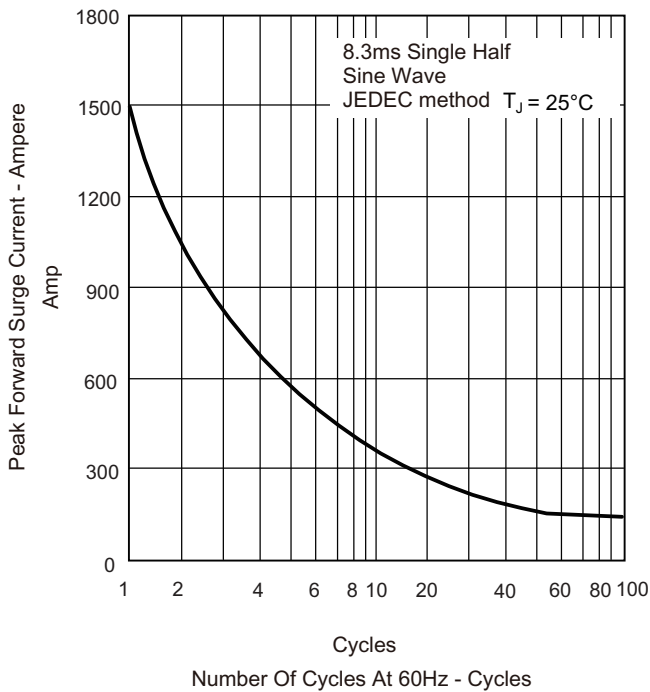
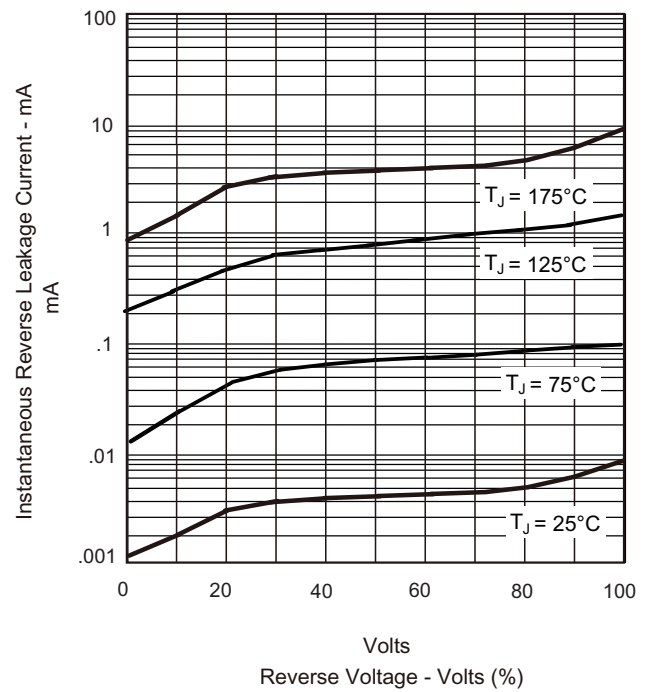


Figure .4-Typical Reverse Characteristics





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