



Forward Polarity:	A139E	A139M	A139N	A139P
Reverse Polarity:	A139ER	A139MR	A139NR	A139PR

I<sup>2</sup>t Rating (for t greater than .001 sec. and less than .0083 sec., non-recurrent)

Maximum Peak Forward Voltage Drop (I<sub>O</sub> = 25 Adc at T<sub>C</sub> = 75°C), V<sub>FM</sub>

Maximum Average Reverse Current (I<sub>O</sub> = 25 Adc at T<sub>C</sub> = 75°C), I<sub>R(AV)</sub>

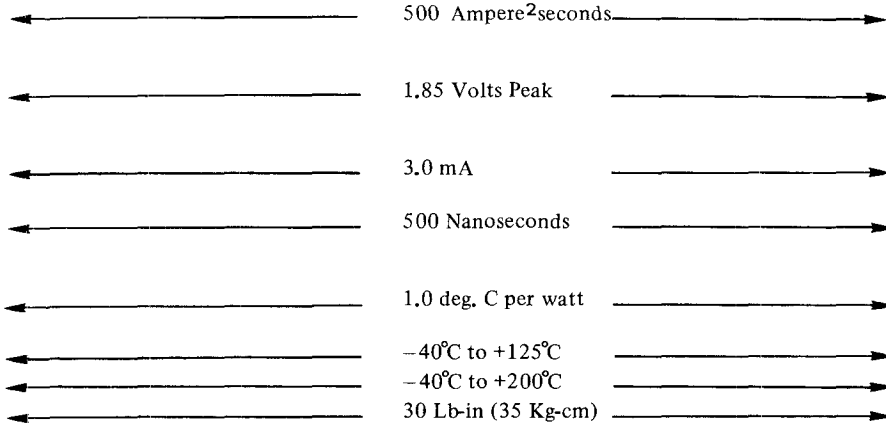
Maximum Reverse Recovery Time t<sub>rr</sub> (2)

Maximum Effective Thermal Resistance Junction to Case, R<sub>θJC</sub>

Junction Operating Temperature Range, T<sub>J</sub>

Storage Temperature Range, T<sub>stg</sub>

Stud Torque

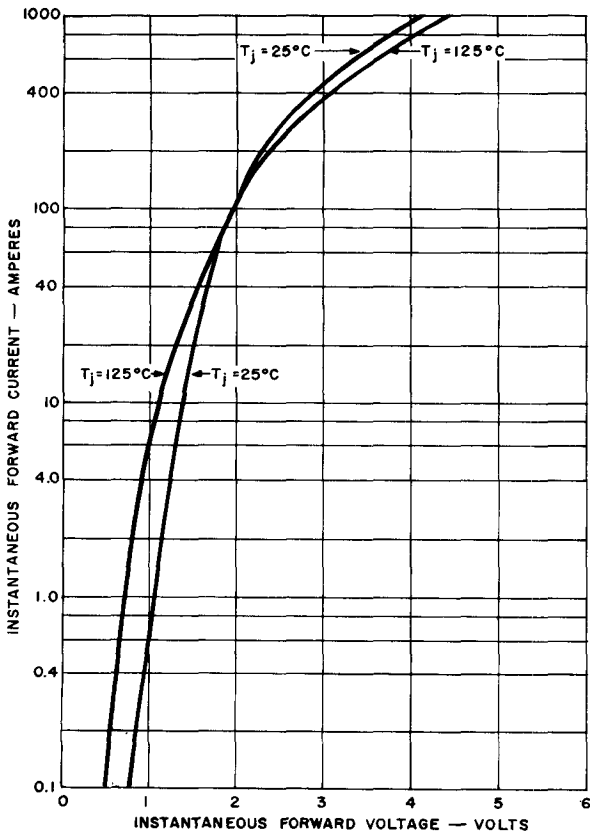


(1) Maximum thermal resistance, case to ambient, for which maximum voltage and temperature ratings apply is:

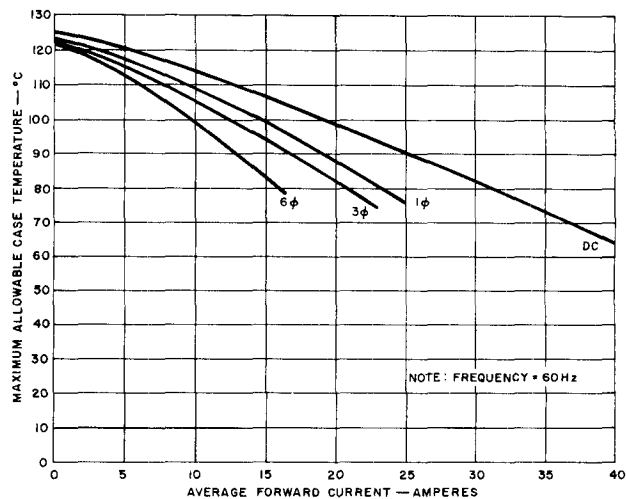
Voltage Type :	500	600	800	1000	Volts
Sinusoidal Voltage:	14.0	12.0	9.0	7.0	°C per watt
DC Voltage :	3.7	3.0	2.0	1.4	°C per watt

(2) Reverse recovery time measured at T<sub>C</sub> = 25°C with I<sub>FM</sub> = 5.0 Amp., commutating di/dt = 50 Amp/μsec, max. reverse recovery current = 15 Amp. peak.

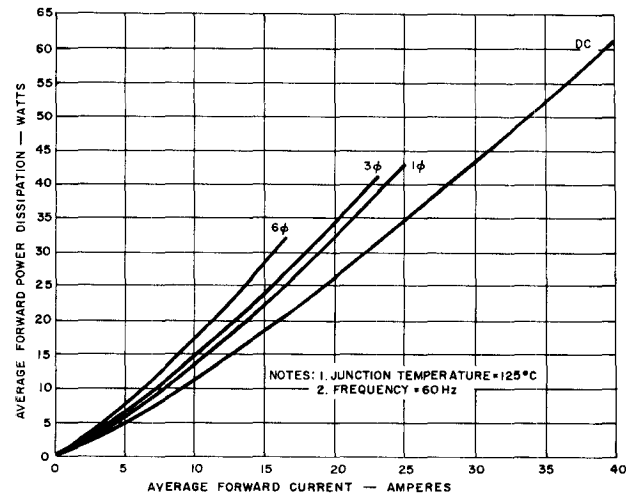
(3) To prevent possible device damage during reverse recovery, it is recommended that the rate of rise of reverse voltage be limited to 1200 volts per micro second maximum. An RC Snubber connected across the rectifier diode may be used to limit the rate of rise of reverse voltage.



**MAXIMUM FORWARD CHARACTERISTICS**



**AVERAGE CURRENT RATING VS. CASE TEMPERATURE**



**MAXIMUM AVERAGE FORWARD POWER DISSIPATION**  
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