



- Positive temperature coefficient
- Temperature-independent switching
- Maximum working temperature at 175 °C
- Unipolar devices and zero reverse recovery current
- Zero forward recovery current
- Essentially no switching losses
- Reduction of heat sink requirements
- High-frequency operation



(Per Leg)

Forward voltage drop	V_F	V	$I_F=10A, T_J=25^{\circ}C$	1.42	1.54
			$I_F=10A, T_J=175^{\circ}C$	2.1	-
Reverse leakage current	I_R	μA	$V_R=1200V, T_J=25^{\circ}C$	1.3	13
			$V_R=1200V, T_J=175^{\circ}C$	6	-
Total capacitive charge	Q_C	nC	$V_R=800V, T_J=25^{\circ}C, Q_C=\int_0^{V_R} I_R(V) dV$	53	
Total capacitance	C	μF	$V_R=0V, f=1MHz$	700	-
			$V_R=400V, f=1MHz$	49	-
			$V_R=800V, f=1MHz$	39	-
Capacitance Stored Energy	E_C	μJ	$V_R=800V$	14	-

$T_a=25$ Unless otherwise specified

Thermal resistance	R_{J-C}	$^{\circ}C/W$	0.56* 0.30**

* Per Leg, ** Per Device

(Per Leg)

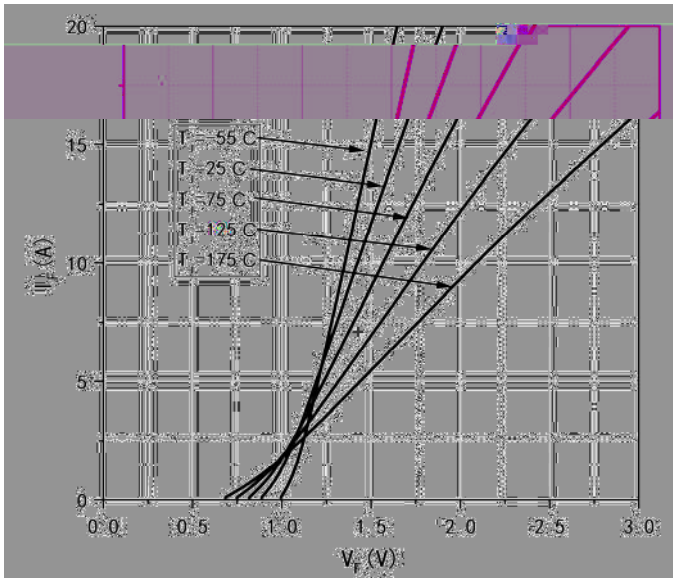


Figure 1. Forward Characteristics

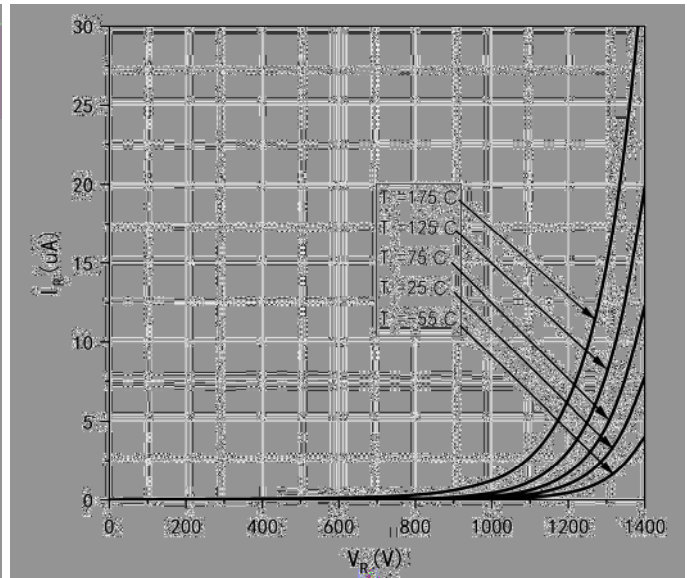


Figure 2. Reverse Characteristic

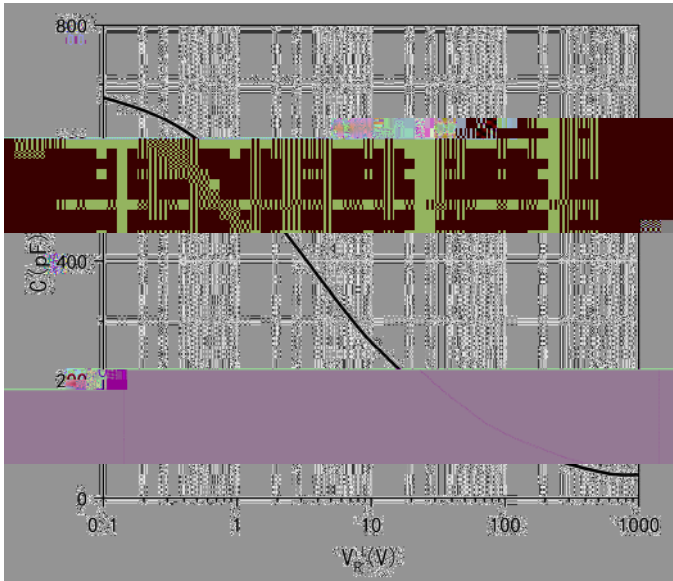


Figure 3. Capacitance vs. Reverse Voltage

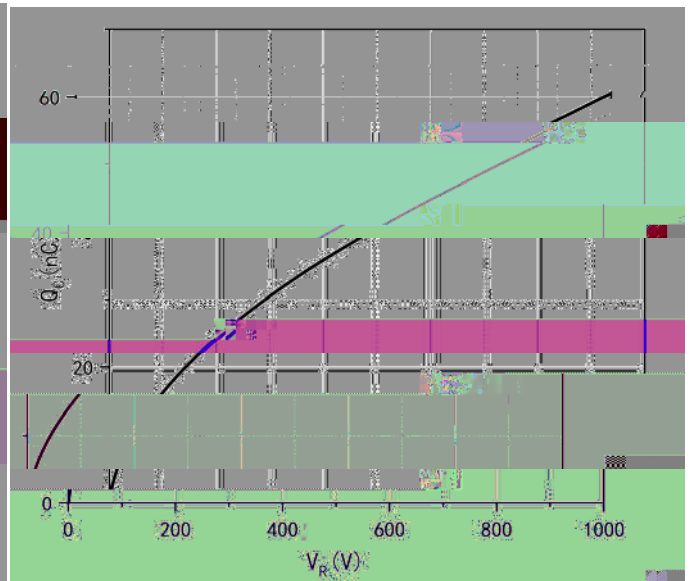


Figure 4. Total Capacitance Charge vs. Reverse Voltage

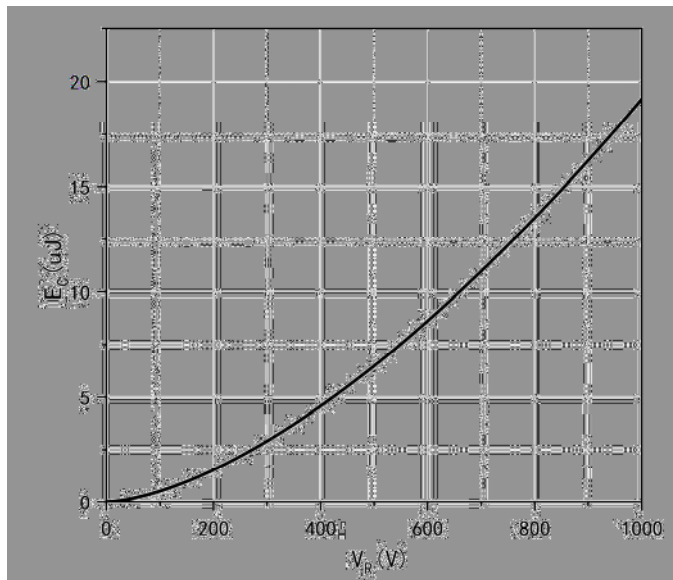


Figure 5. Capacitance Stored Energy

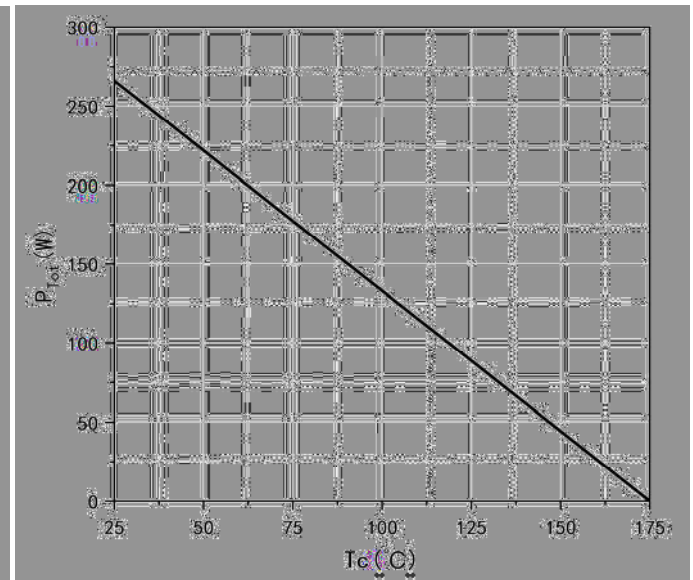


Figure 6. Power Derating

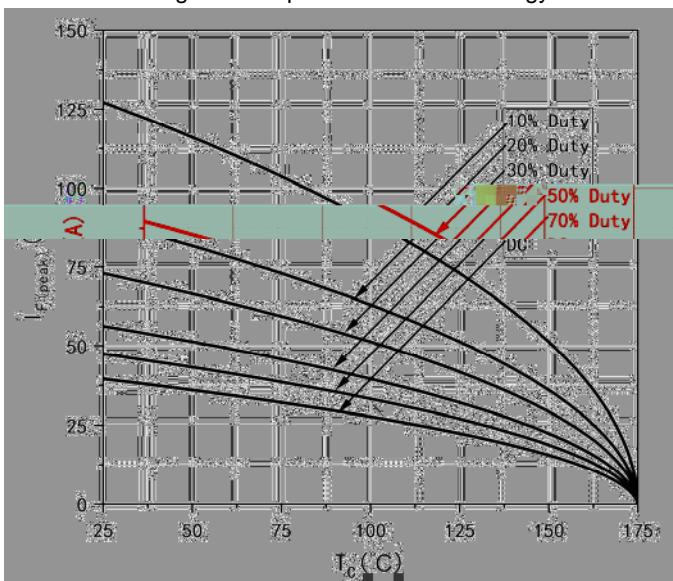


Figure 7. Current Derating

(Device)

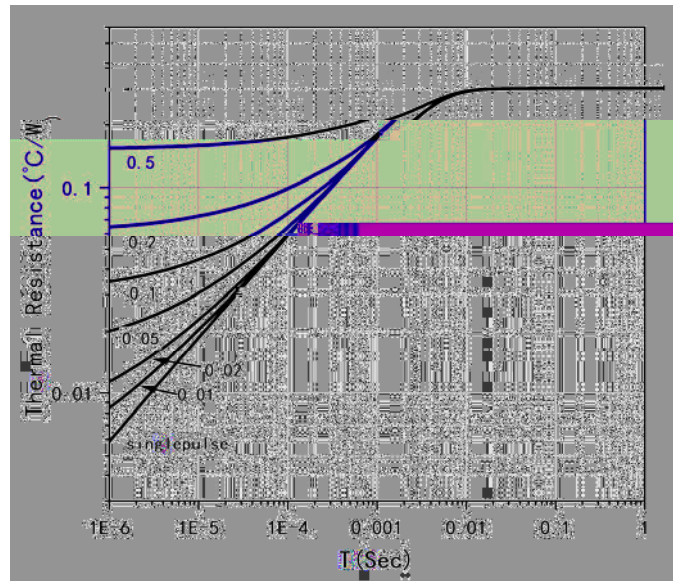


Figure 8. Transient Thermal Impedance



S4

A= Å



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