

V_{RRM}	650 V
I_F 135°C	50 A
Q_C	135.3nC



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

Typical applications are in power factor correction(PFC), solar inverter, uninterruptible power supply, motor drives, photovoltaic inverter, electric car and charger.

: TO-263

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

: Tin plated leads

: As marked

($T_C=25$ Unless otherwise specified)

Device marking code			D106550BQG3
Reverse voltage (repetitive peak) @ $T_j=25^\circ\text{C}$	V_{RRM}	V	650
Reverse voltage (Surge Peak) @ $T_j=25^\circ\text{C}$	V_{RSM}	V	650
Reverse voltage (DC) @ $T_j=25^\circ\text{C}$	V_{DC}	V	650
Continuous forward current @ $T_c=25^\circ\text{C}$	I_F	A	108
Continuous forward current @ $T_c=135^\circ\text{C}$			50
Non-repetitive peak forward surge current @ $T_c=25^\circ\text{C}$, $t_p=10\text{ms}$, Half Sine Wave	I_{FSM}	A	380
Power Dissipation @ $T_c=25^\circ\text{C}$	P_{TOT}	W	375
Power Dissipation @ $T_c=110^\circ\text{C}$			162.5
i^2t Value @ $T_c=25^\circ\text{C}$, $t_p=10\text{ms}$	i^2dt	A^2S	722
Operating junction and Storage temperature range	T_j, T_{stg}	$^\circ\text{C}$	-55 to +175



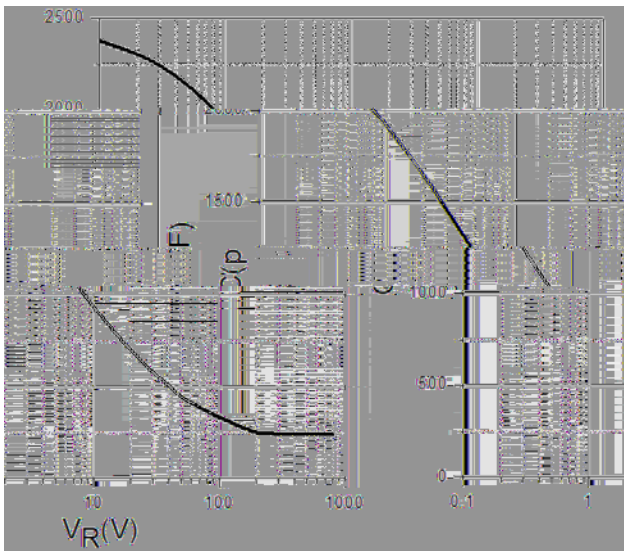


Figure 3. Capacitance vs. Reverse Voltage

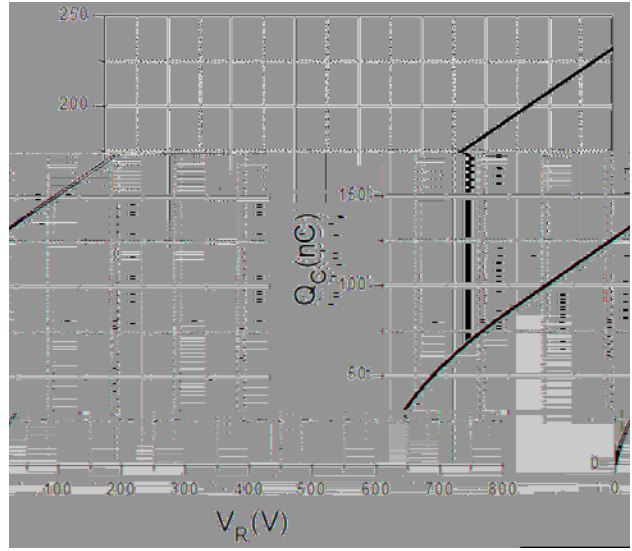


Figure 4. Total Capacitance Charge vs. Reverse Voltage

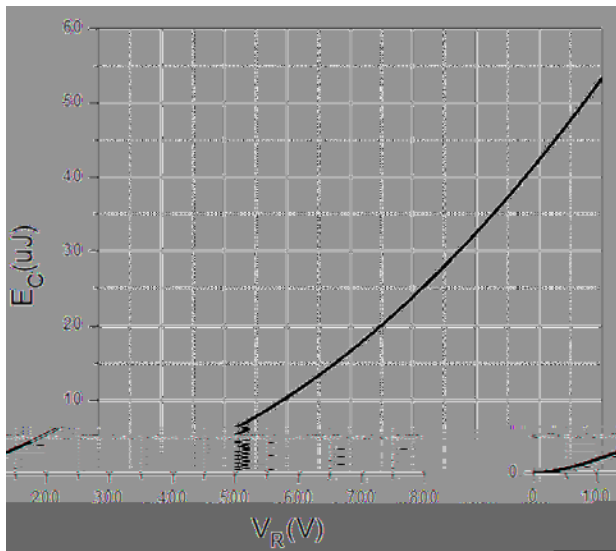


Figure 5. Capacitance Stored Energy

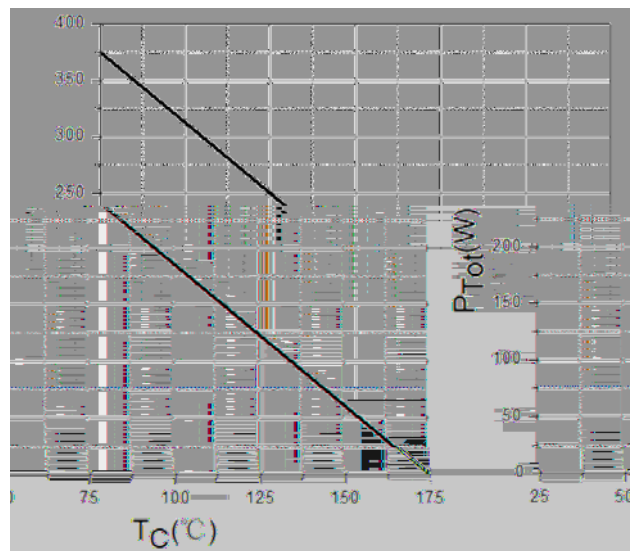


Figure 6. Power Derating

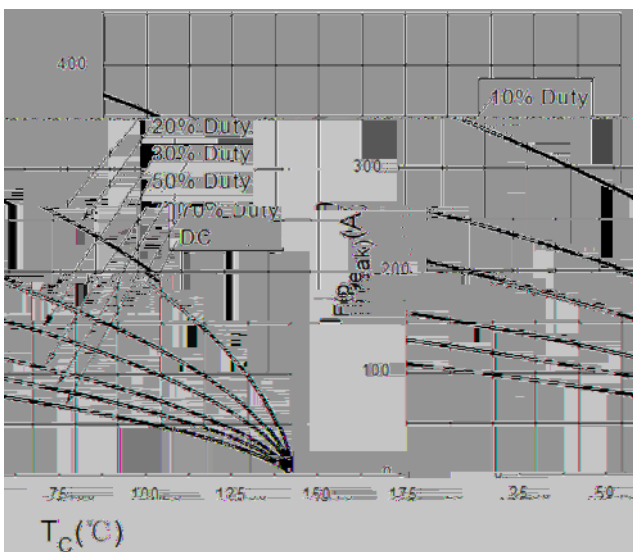


Figure 7. Current Derating

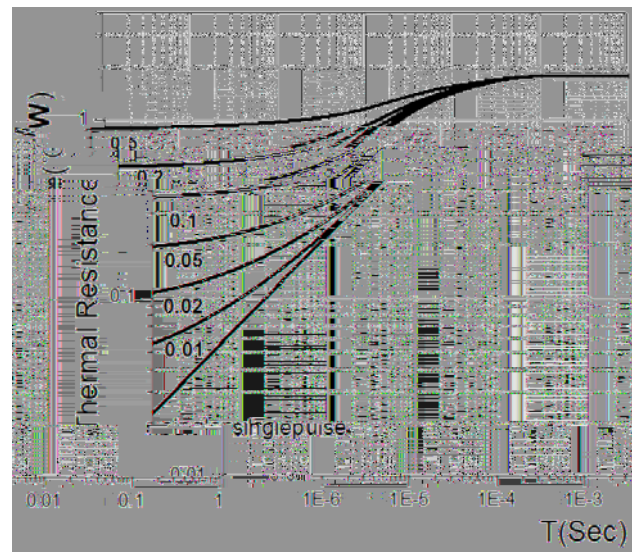


Figure 8. Transient Thermal Impedance



Dim	Min	Max
A	9.5	11.5
B	9.7	10.5
C	8.4	9.0
D	0.28	0.64
E	0.68	0.94
F	4.55	5.6
G	4.04	5.10
H	1.14	1.4
I	0	0.2
J	4.9	6.05
K	1.79	2.79
L	7.3	7.9
M	6.2	6.8





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