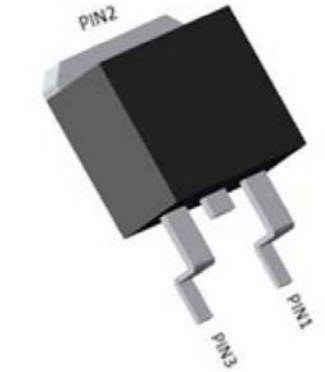
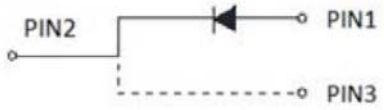
RoHS
COMPLIANT

V_{RRM}	1200V
$I_{F\ 135°C}$	14A
Q_C	53nC





- 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
- 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
- : Tin plated leads
- : As marked

■ (T_C=25 Unless otherwise specified

Device marking code			D112010BXQG2
Reverse voltage (repetitive peak) @ T_j=25°C	V_{RRM}	V	1200
Reverse voltage (Surge Peak) @ T_j=25°C	V_{RSM}	V	1200
Reverse voltage (DC) @ T_j=25°C	V_{DC}	V	1200
Continuous forward current @ T_c=25°C	I_F	A	33
Continuous forward current @ T_c=135°C			14
Continuous forward current @ T_c=141°C			10
Non-repetitive peak forward surge current @ T_c=25°C, tp=10ms, Half Sine Wave	I_{FSM}	A	85
Power Dissipation@ T_c=25°C	P_{TOT}	W	158
Power Dissipation@ T_c=110°C			68
i^2t Value@ Tc=25°C ,tp=10ms	$\int i^2dt$	A^2S	36
Operating junction and Storage temperature range	T_j ,T_{stg}	°C	-55 to +175

■

Forward voltage drop	V_F	V	I_F=10A, T_j=25°C	1.42	1.54
			I_F=10A, T_j=175°C	2.1	-
Reverse leakage current	I_R	μA	V_R=1200V, T_j=25°C	1.3	13
			V_R=1200V, T_j=175°C	6	-
Total capacitive charge	Q_C	nC	V_R=800V, T_j=25°C , $QC=\int_0^{VR} C(V)dV$	53	
Total capacitance	C	pF	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	$R_{\theta J-C}$	°C /W	0.95

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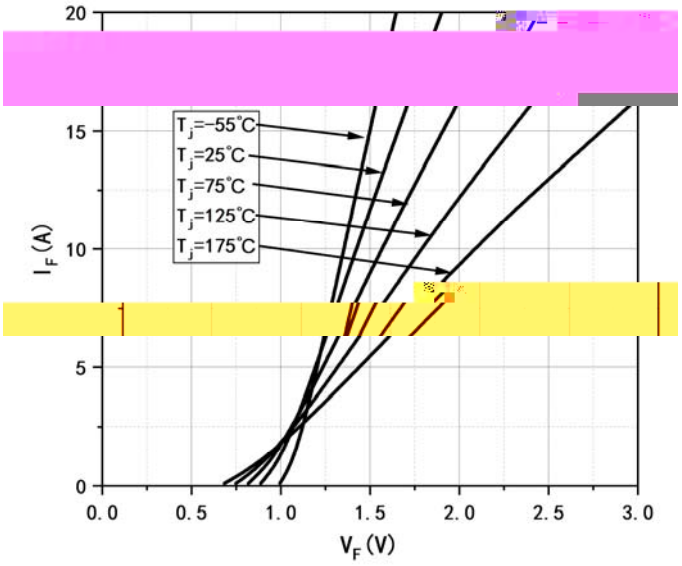


Figure 1. Forward Characteristics

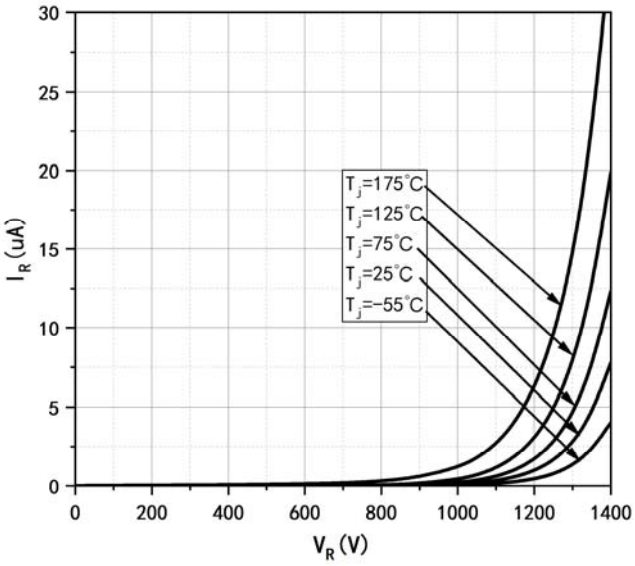


Figure 2. Reverse Characteristic

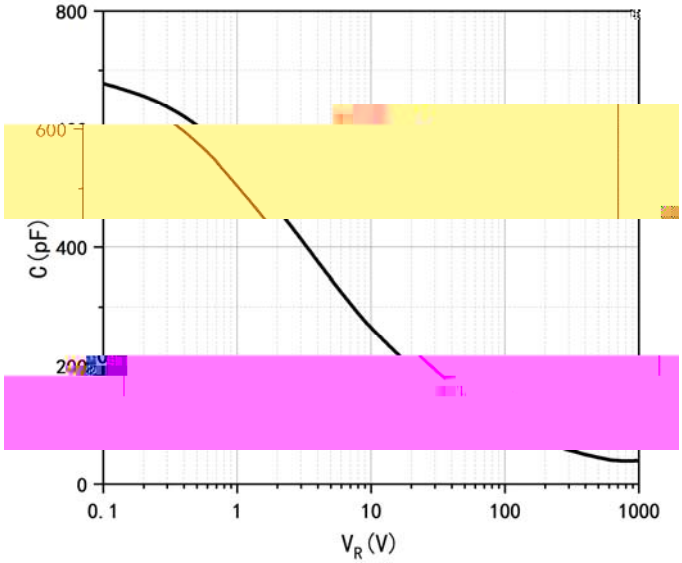


Figure 3. Capacitance vs. Reverse Voltage

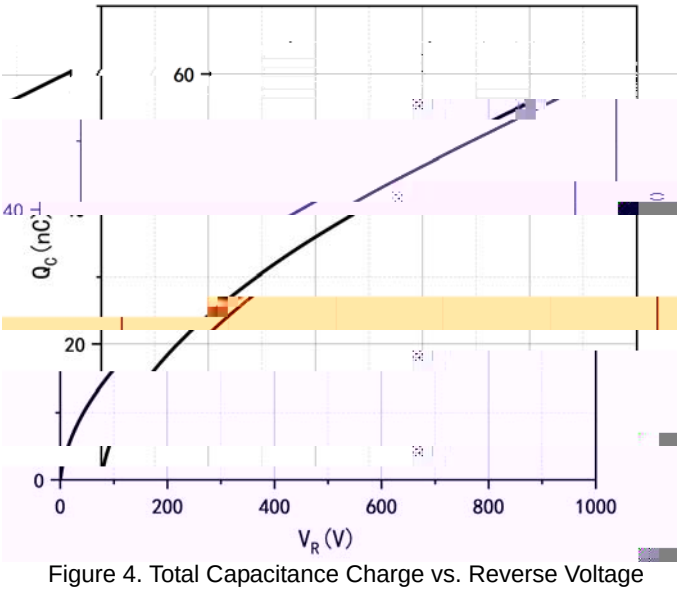


Figure 4. Total Capacitance Charge vs. Reverse Voltage

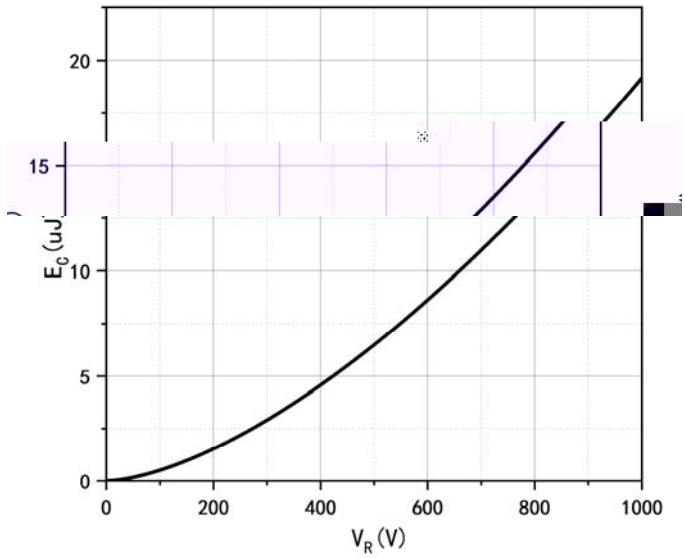


Figure 5. Capacitance Stored Energy

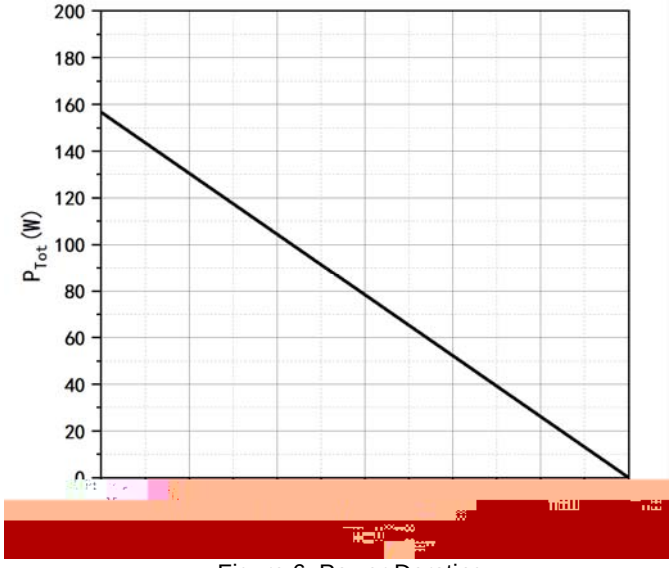


Figure 6. Power Derating

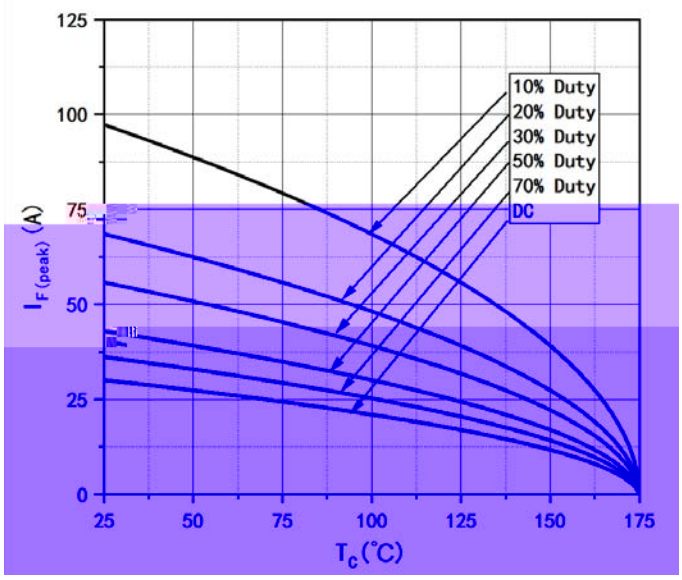


Figure 7. Current Derating

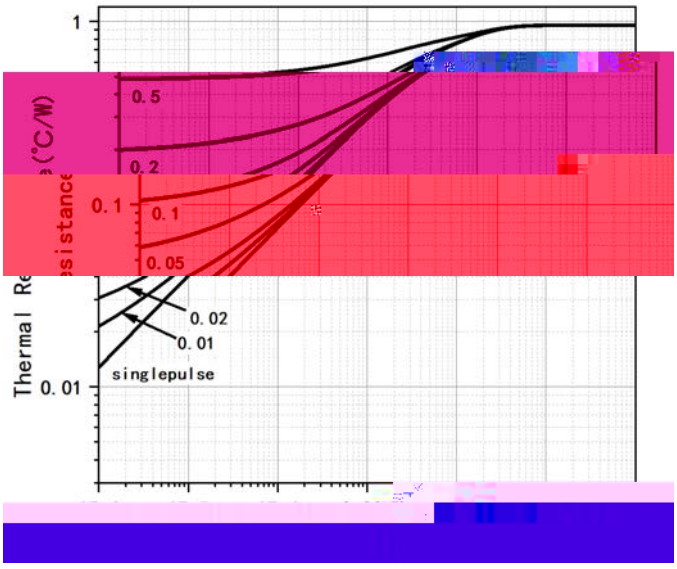
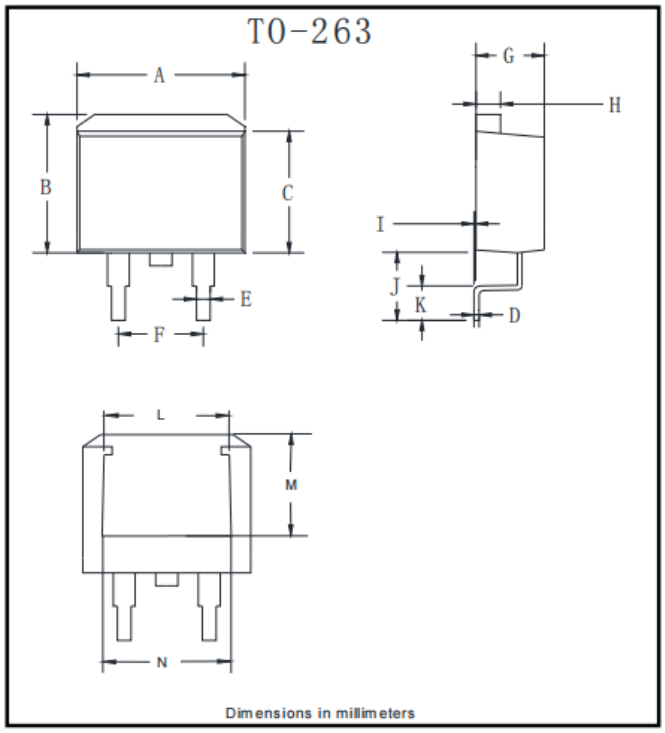


Figure 8. Transient Thermal Impedance

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TO-263		
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
N	7.6	8.2

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