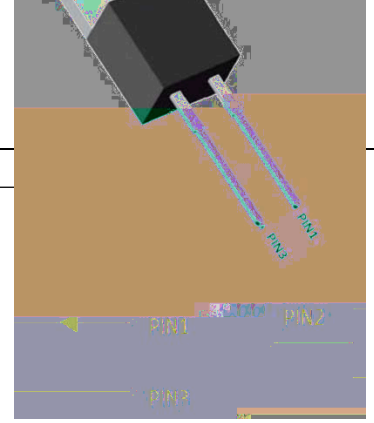


YJD112015PGG2



Typical Applications

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

Mechanical Data

Package: TO-220AC

Terminals: Tin plated leads

Polarity: As marked

Maximum Ratings ($T_c=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	
Device marking code			D112015PGG2
Reverse voltage (repetitive peak) @ $T_j=25^\circ\text{C}$	V_{RRM}	V	1200
Reverse voltage (Surge Peak) @ $T_j=25^\circ\text{C}$	V_{RSM}	V	1200
Reverse voltage (DC) @ $T_j=25^\circ\text{C}$	V_{DC}	V	1200
Continuous forward current @ $T_c=25^\circ\text{C}$	I_F	A	
Continuous forward current @ $T_c=135^\circ\text{C}$			
Continuous forward current @ $T_c=158^\circ\text{C}$			
Non-repetitive peak forward surge current @ $T_c=25^\circ\text{C}$, $t_p=10\text{ms}$, Half Sine Wave	I_{FSM}	A	140
Power Dissipation @ $T_c=25^\circ\text{C}$	P_{TOT}	W	241
Power Dissipation @ $T_c=110^\circ\text{C}$			104



Electrical Characteristics

PARAMTETER	SYMBOL	UNIT	TEST CONDITIONS	Typ.	Max.
Forward voltage drop	V_F	V	$I_F=15A, T_j=25^{\circ}C$	1.25	1.45
			$I_F=15A, T_j=175^{\circ}C$	1.65	1.85
Reverse leakage current	I_R	μA	$V_R=1200V, T_j=25^{\circ}C$	0.5	25
			$V_R=1200V, T_j=175^{\circ}C$	5	-
Total capacitive charge	Q_C	nC	$V_R=800V, T_j=25^{\circ}C,$ $Q_C=\int_0^{V_R} C(V)dV$	114	-
Total capacitance	C	pF	$V_R=0V, f=1MHZ$	1552	-

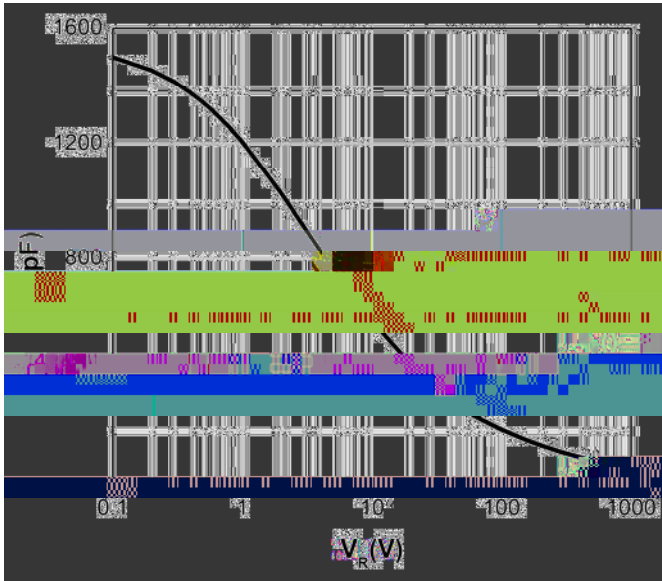


Figure 3. Capacitance vs. Reverse Voltage

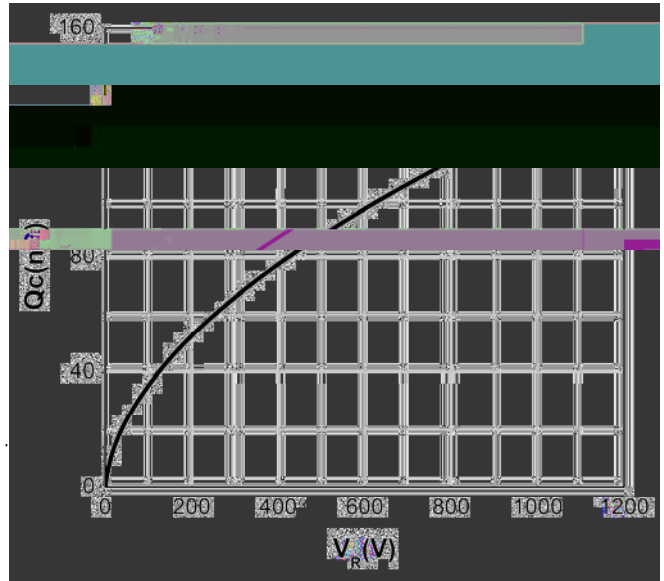


Figure 4. Total Capacitance Charge vs. Reverse Voltage

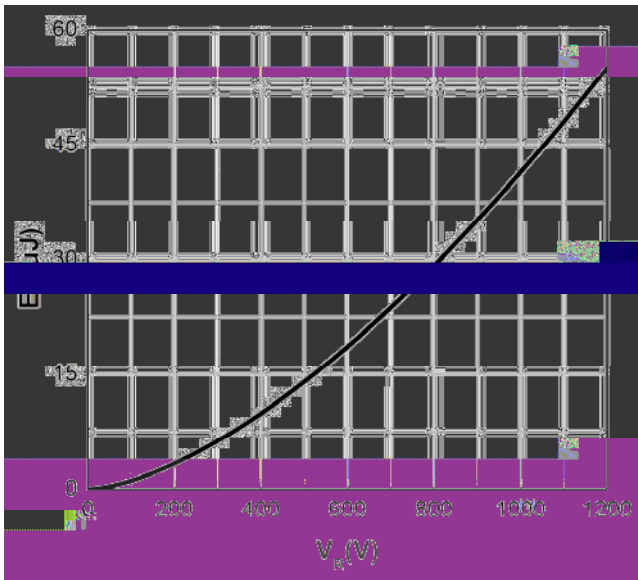


Figure 5. Capacitance Stored Energy

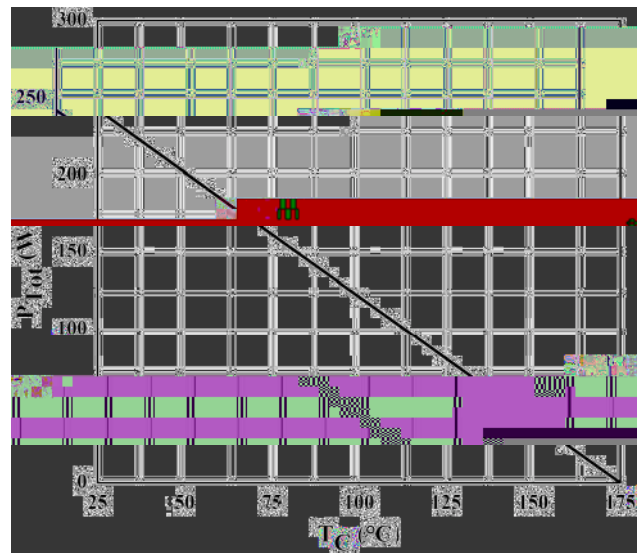


Figure 6. Power Derating

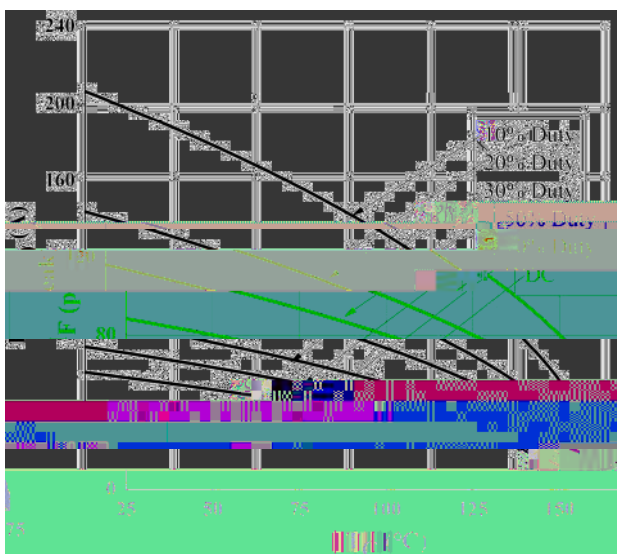
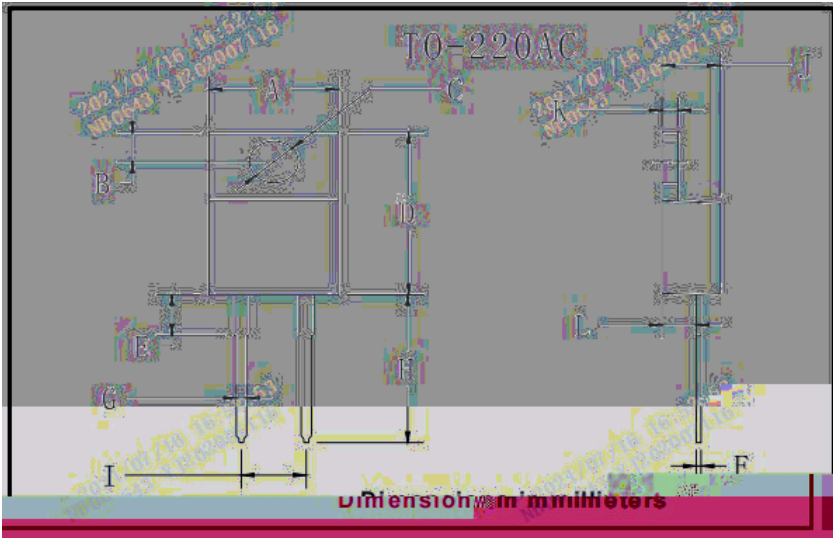


Figure 7. Current Derating



Figure 8. Transient Thermal Impedance

Outline Dimensions



TO-220AC		
Dim	Min	Max
A	9.5	10.9
B	2.22	3.27
C	3.34	4.31
D	14.5	15.5
E	3.16	4.46
F	0.28	0.64
G	0.68	0.94
H	13.06	14.63



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