RoHS
COMPLIANT

V_{RRM}	1200V
$I_{F\ 100°C}$	8A „& „y˜4 P

● P

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

- : ITO-220AC
  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			D112008FQG3
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	12
Continuous forward current @ T_C=100°C			8
Continuous forward current @ T_C=135°C			5
Non-repetitive peak forward surge current @ T_C=25°C, tp=10ms, Half Sine Wave	I_{FSM}	A	95
Power Dissipation@ T_C=25°C	P_{TOT}	W	33
Power Dissipation@ T_C=110°C			14
i^2t Value@ T_C=25°C ,tp=10ms	$\int i^2dt$	A^2S	45
Operating junction and Storage temperature range	T_j , T_{stg}	°C	-55 to +175

■

Forward voltage drop	V_F	V	I_F=8A, T_j=25°C	1.46	1.55
			I_F=8A, T_j=175°C	2.2	-
Reverse leakage current	I_R	μA	V_R=1200V, T_j=25°C	1	10
			V_R=1200V, T_j=175°C	5	-
Total capacitive charge	Q_C	nC	V_R=800V, T_j=25°C , $Q_C=\int_0^{VR}C(V)dV$	37	-
Total capacitance	C	pF	V_R=0V, f=1MHZ	500	-
			V_R=400V, f=1MHZ	35	-
			V_R=800V, f=1MHZ	27	-
Capacitance Stored Energy	E_C	μJ	V_R=800V	9.5	-

■ Ta=25 Unless otherwise specified

Thermal resistance	$R_{\theta J-C}$	°C /W	4.55

■

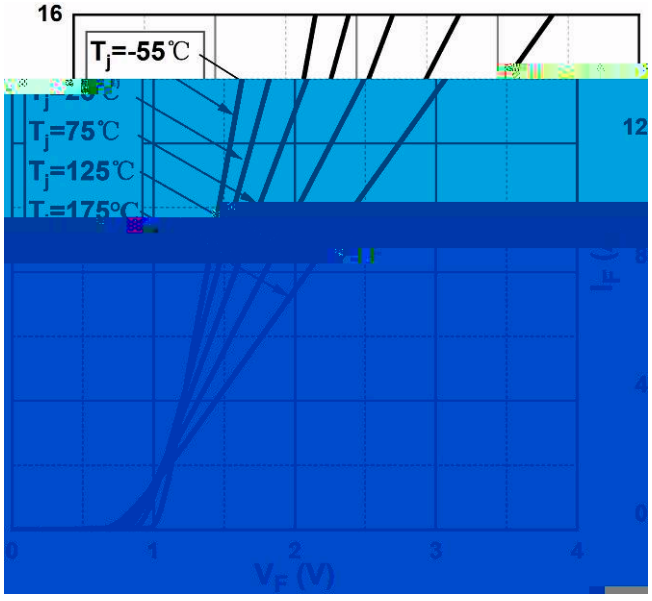


Figure 1. Forward Characteristics

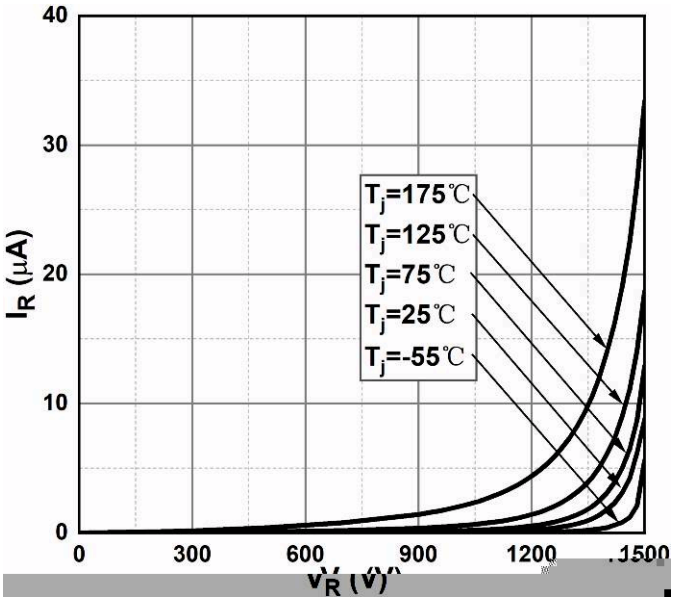


Figure 2. Reverse Characteristics

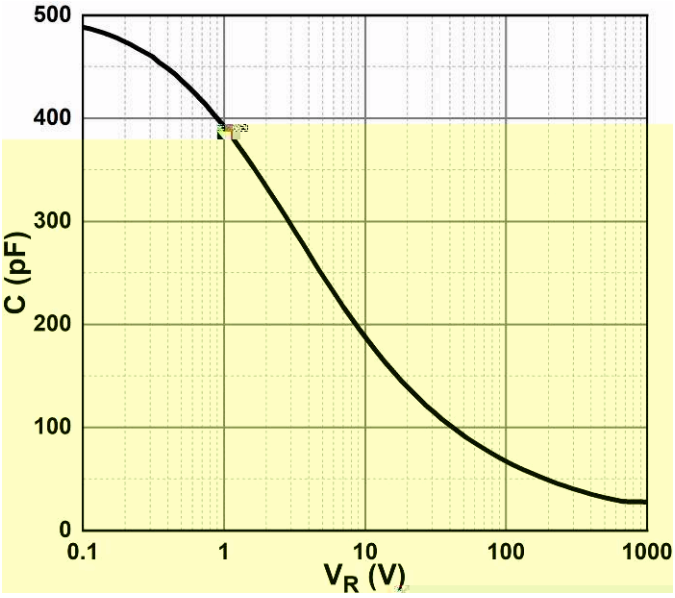


Figure 3. Capacitance vs. Reverse Voltage

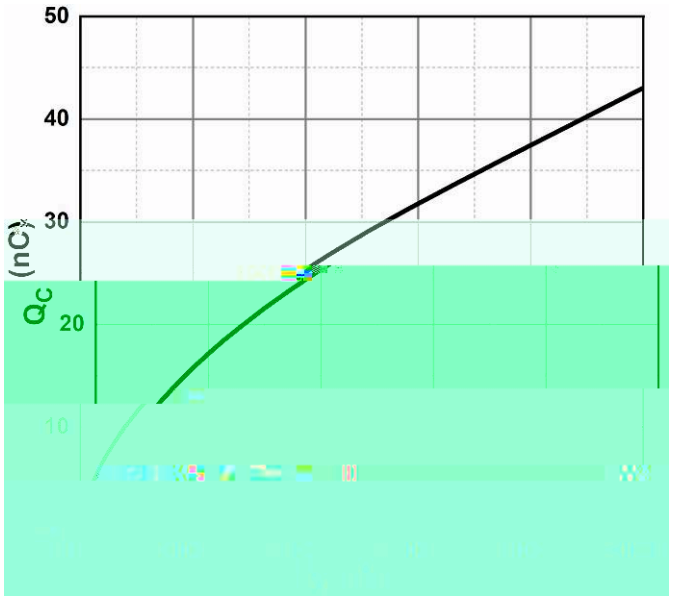


Figure 4. Total Capacitance Charge vs. Reverse Voltage

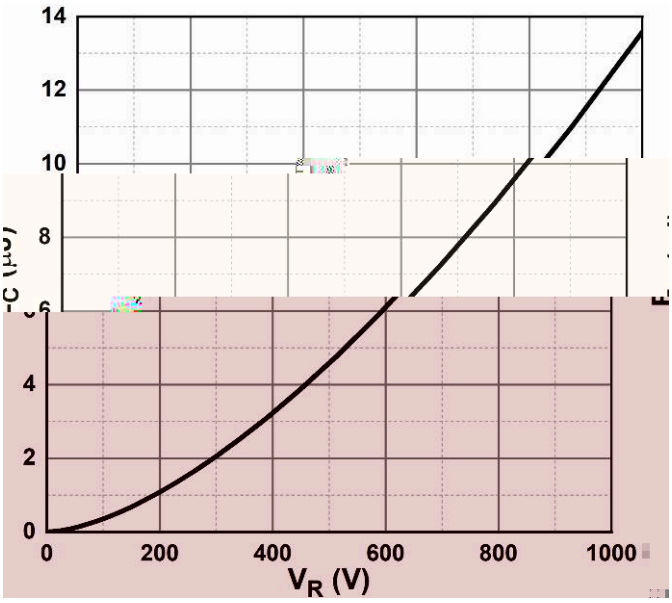


Figure 5. Capacitance Stored Energy

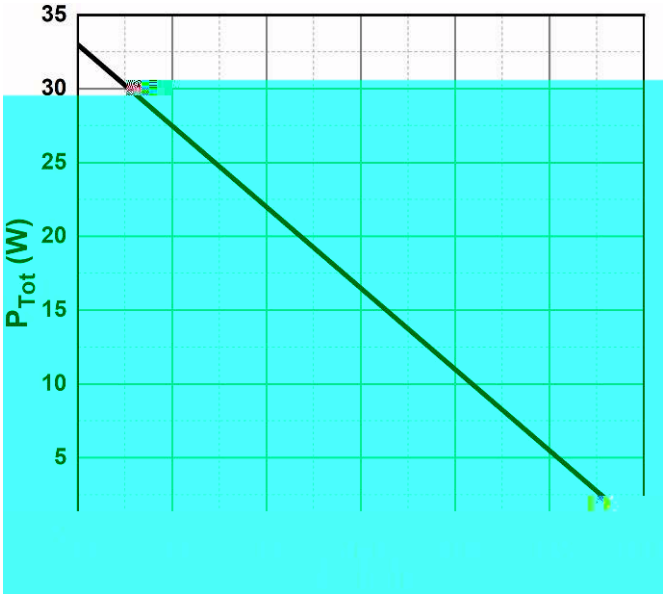


Figure 6. Power Derating

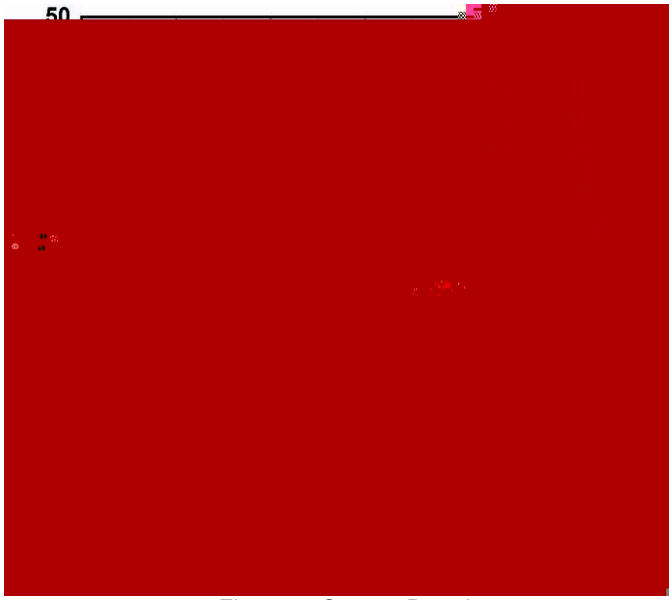


Figure 7. Current Derating

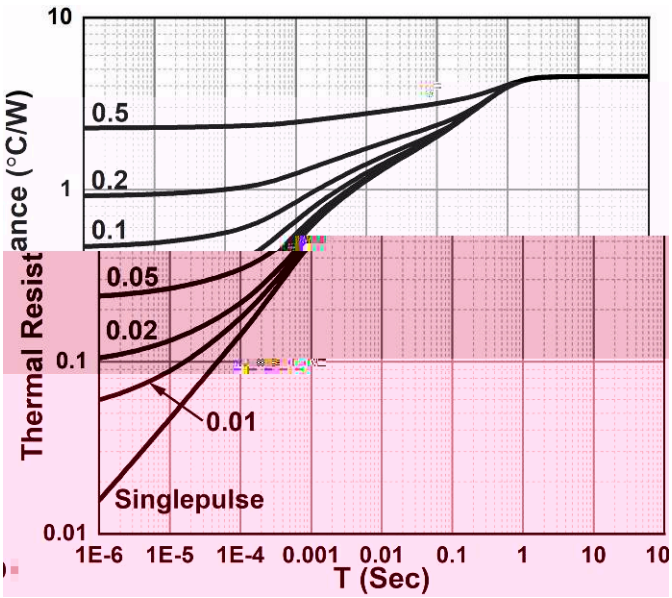
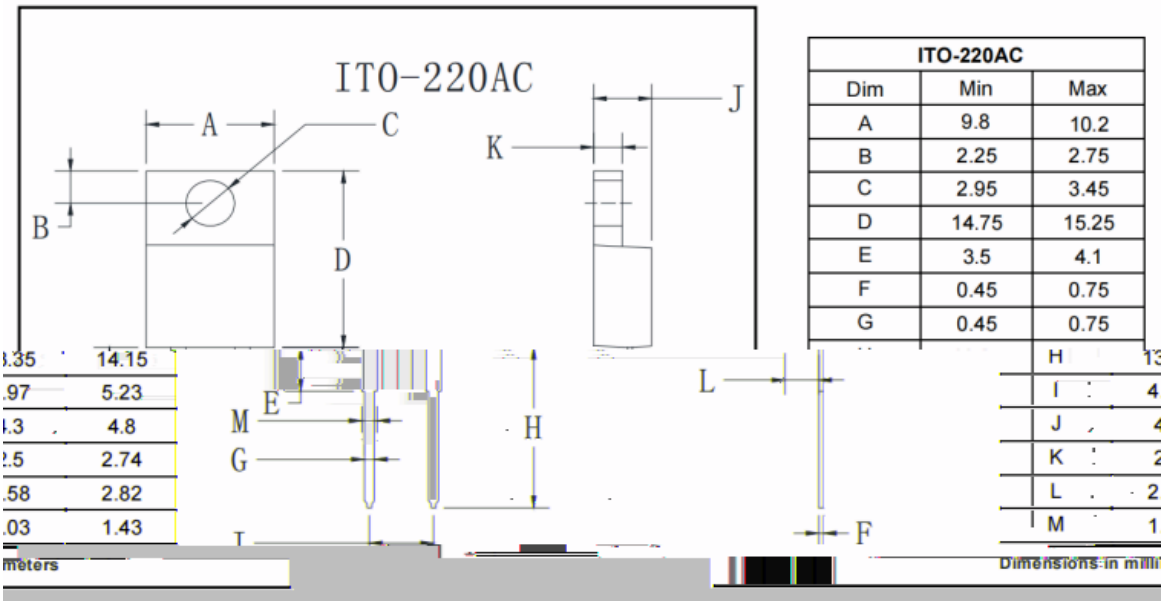


Figure 8. Transient Thermal Impedance

■



ITO-220AC		
Dim	Min	Max
A	9.8	10.2
B	2.25	2.75
C	2.95	3.45
D	14.75	15.25
E	3.5	4.1
F	0.45	0.75
G	0.45	0.75

.35	14.15
.97	5.23
.3	4.8
.5	2.74
.58	2.82
.03	1.43

H	13
I	4
J	4
K	2
L	2
M	1

meters

Dimensions in milli

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.21yangjie.com , or consult your nearest Yangjie's sales office for further assistance.