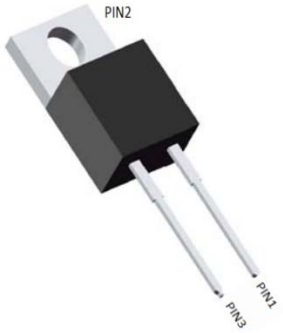
V_{RRM}	650 V
$I_{F\ 135°C}$	6.5 A
Q_C	12 nC



- 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-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			D106504PG1
Reverse voltage (repetitive peak) @ T_j=25°C	V_{RRM}	V	650
Reverse voltage (Surge Peak) @ T_j=25°C	V_{RSM}	V	650
Reverse voltage (DC) @ T_j=25°C	V_{DC}	V	650
Continuous forward current @ T_c=25°C	I_F	A	14
Continuous forward current @ T_c=135°C			6.5
Continuous forward current @ T_c=156°C			4
Non-repetitive peak forward surge current @ T_c=25°C, tp=10ms, Half Sine Wave	I_{FSM}	A	26
Power Dissipation@ T_c=25°C	P_{TOT}	W	56
Power Dissipation@ T_c=110°C			24
i^2t Value@ Tc=25°C ,tp=10ms	$\int i^2dt$	A^2S	3.3
Operating junction and Storage temperature range	T_j ,T_{stg}	°C	-55 to +175

■

Forward voltage drop	V_F	V	I_F=4A, T_j=25°C	1.4	1.55
			I_F=4A, T_j=175°C	1.7	-
Reverse leakage current	I_R	μA	V_R=650V, T_j=25°C	3	25
			V_R=650V, T_j=175°C	20	-
Total capacitive charge	Q_C	nC	V_R=400V, T_j=25°C , $QC=\int_0^{VR} C(V)dV$	12	-
Total capacitance	C	pF	V_R=0V, f=1MHZ	210	-
			V_R=200V, f=1MHZ	24	-
			V_R=400V, f=1MHZ	18	-
Capacitance Stored Energy	E_C	μJ	V_R=400V	1.5	-

■ (T_a=25 Unless otherwise specified)

Thermal resistance	$R_{\theta J-C}$	°C /W	2.65

■

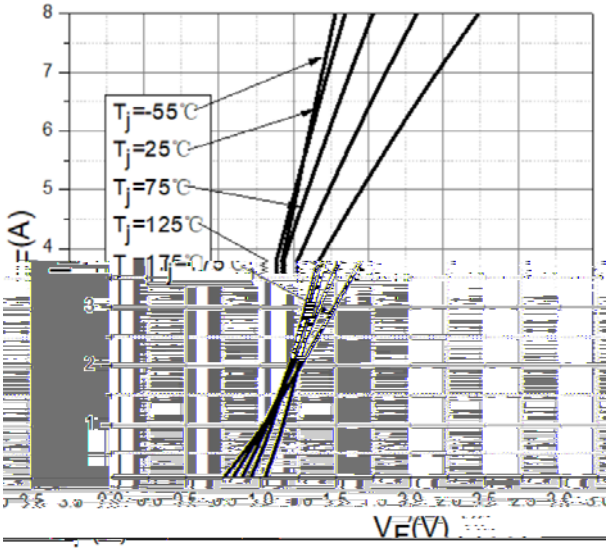


Figure 1. Forward Characteristics

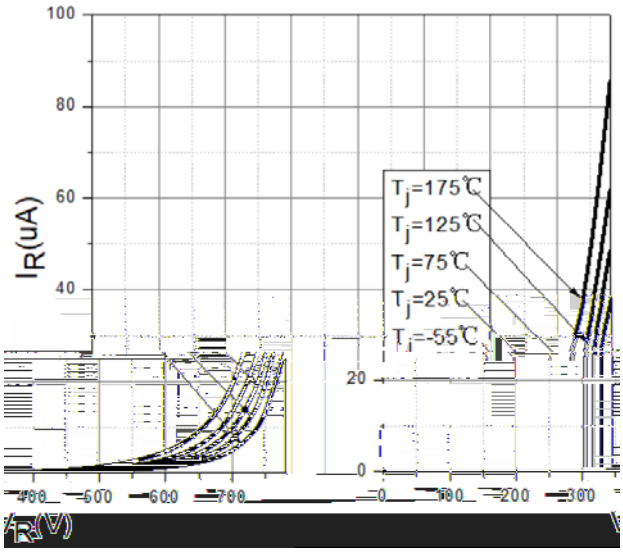


Figure2. Reverse Characteristic

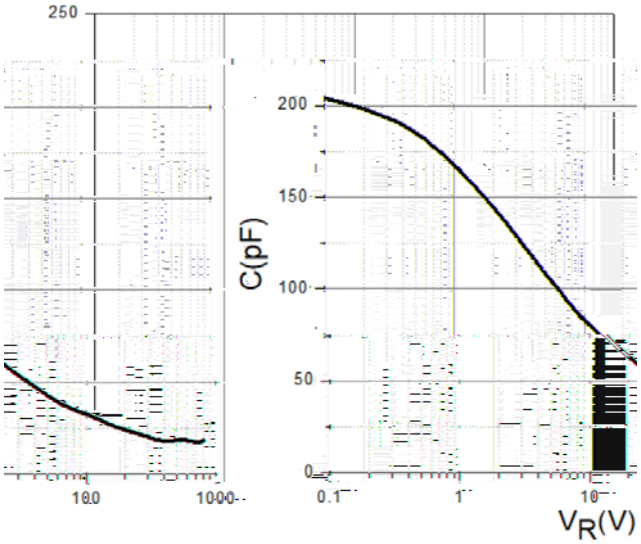


Figure 3. Capacitance vs. Reverse Voltage

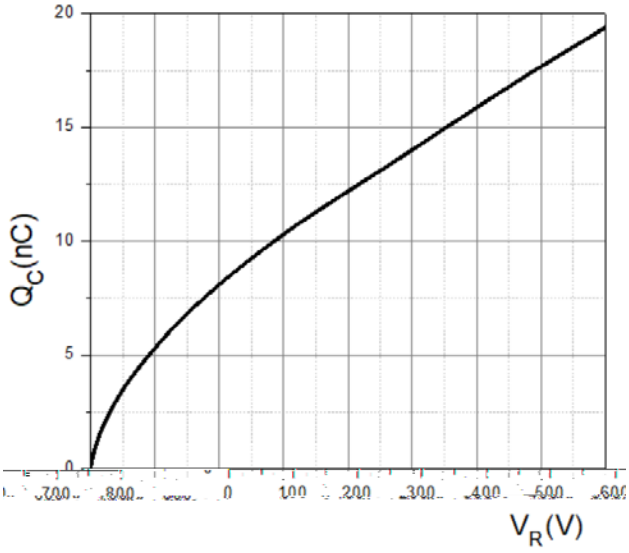


Figure 4. Total Capacitance Charge vs. Reverse Voltage

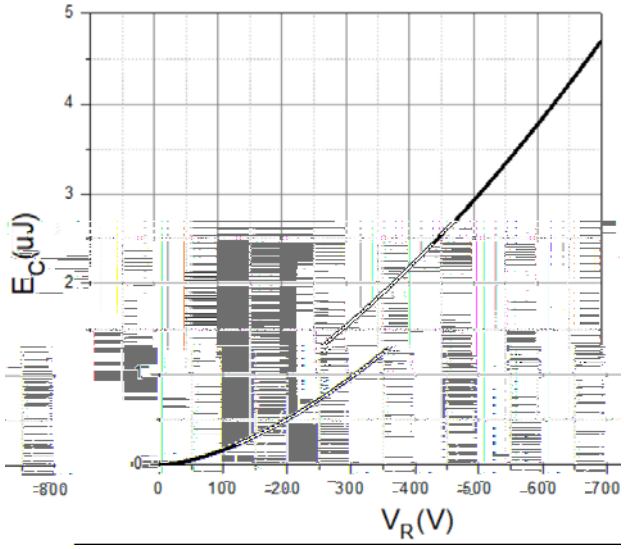


Figure 5. Capacitance Stored Energy

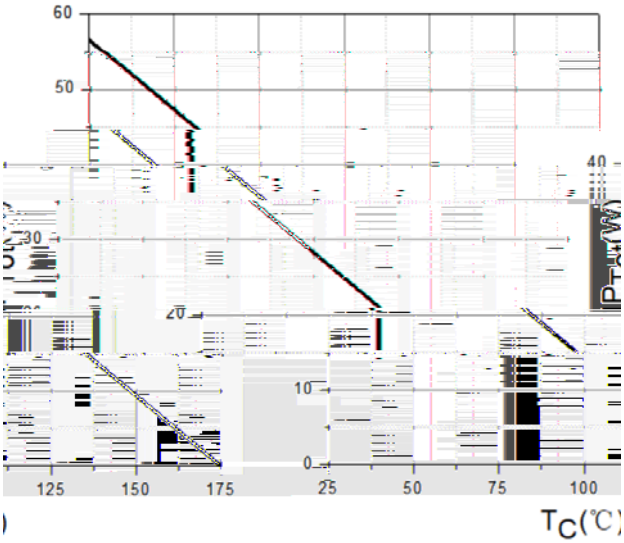


Figure 6. Power Derating

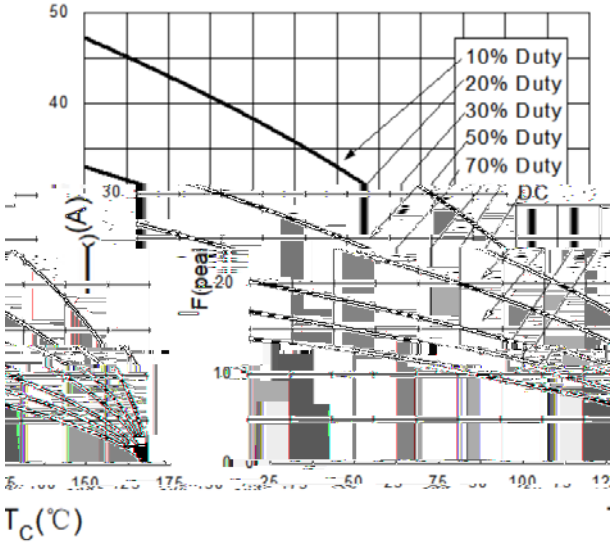


Figure 7. Current Derating

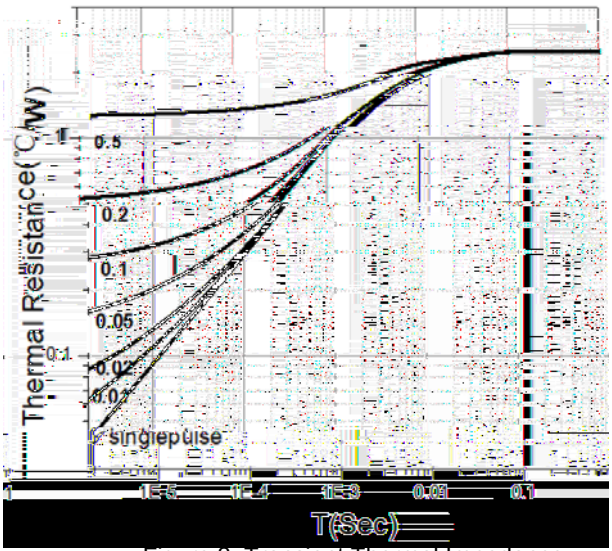


Figure 8. Transient Thermal Impedance

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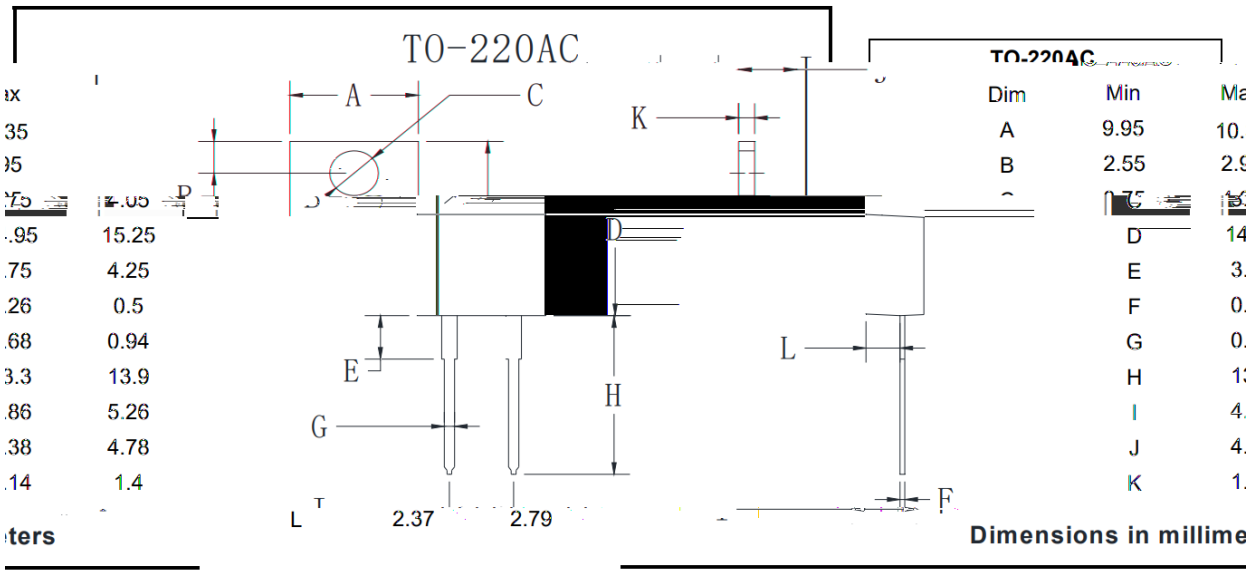

Dim	Min	Ma
A	9.95	10.
B	2.55	2.9
D		14
E		3.
F		0.
G		0.
H		1
I		4.
J		4.
K		1.

.95	15.25
.75	4.25
.26	0.5
.68	0.94
3.3	13.9
.86	5.26
.38	4.78
.14	1.4

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Dimensions in millime

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