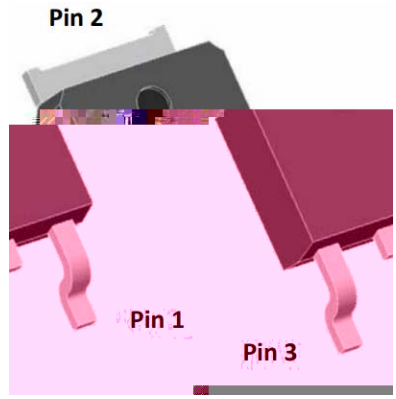
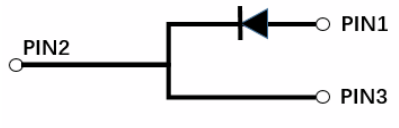
RoHS
COMPLIANT

V_{RRM}	650V
$I_{F\ 135°C}$	11A
Q_C	25nC





- Positive temperature coefficient
- Temperature-independent switching
- Maximum working temperature at 175 °C
- Unipolar devices and zero reverse recovery current
- Zero forward recovery voltage
- 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, automotive battery chargers.

- : TO-252
  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			D106506DQG2
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	23
Continuous forward current @ T_c=135°C			11
Continuous forward current @ T_c=160°C			6
Non-repetitive peak forward surge current @ T_c=25°C, tp=10ms, Half Sine Wave	I_{FSM}	A	65
Power Dissipation@ T_c=25°C	P_{TOT}	W	100
Power Dissipation@ T_c=110°C			43
i^2t Value@ Tc=25°C ,tp=10ms	$\int i^2dt$	A^2S	21
Operating junction and Storage temperature range	T_j ,T_{stg}	°C	-55 to +175

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[redacted]					
Forward voltage drop	V_F	V	I_F=6A, T_j=25°C		
			I_F=6A, T_j=175°C	[redacted]	
Reverse leakage current	I_R	s	V_R=650V, T_j #	!	

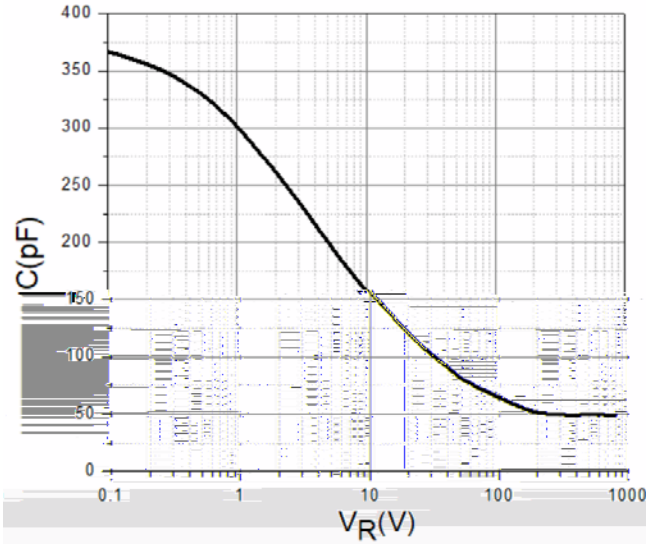

Figure 3. Capacitance vs. Reverse Voltage

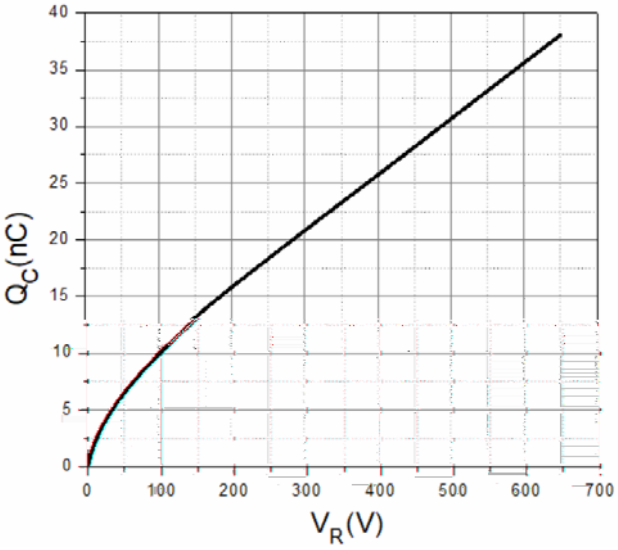

Figure 4. Total Capacitance Charge vs. Reverse Voltage

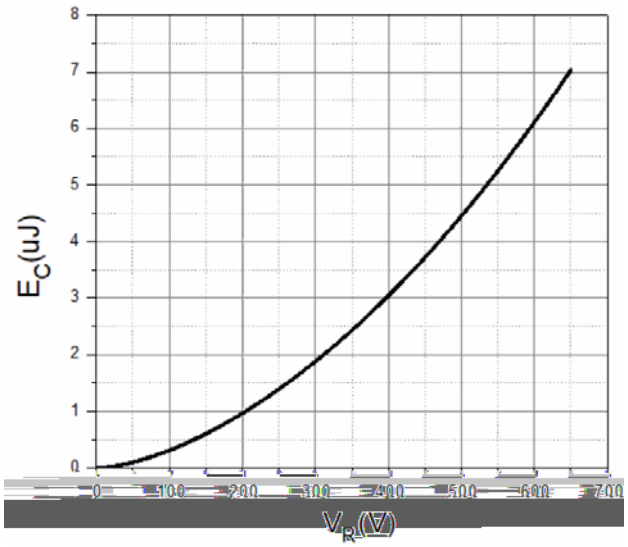

Figure 5. Capacitance Stored Energy

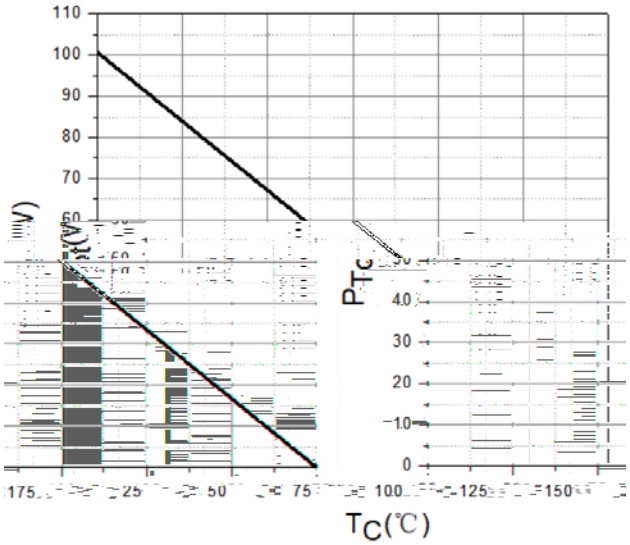

Figure 6. Power Derating

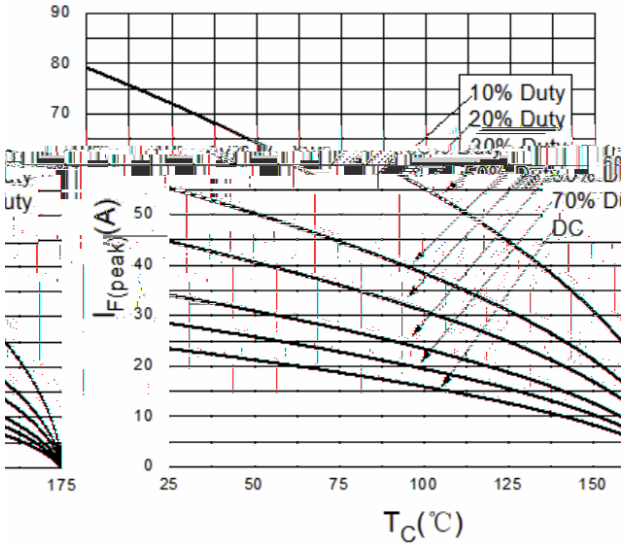

Figure 7. Current Derating

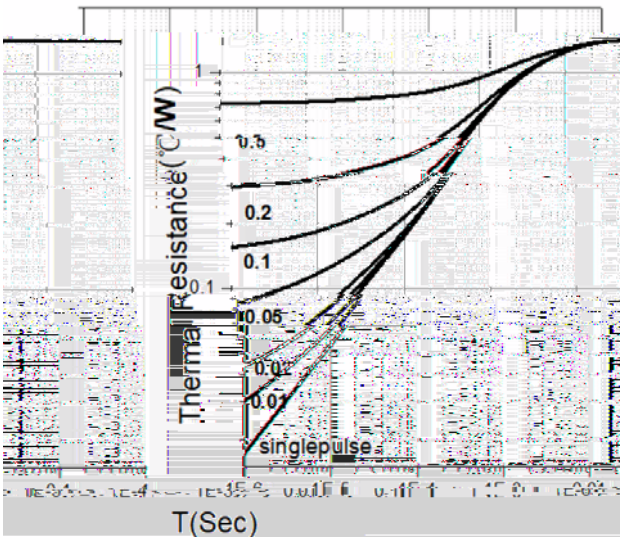

Figure 8. Transient Thermal Impedance

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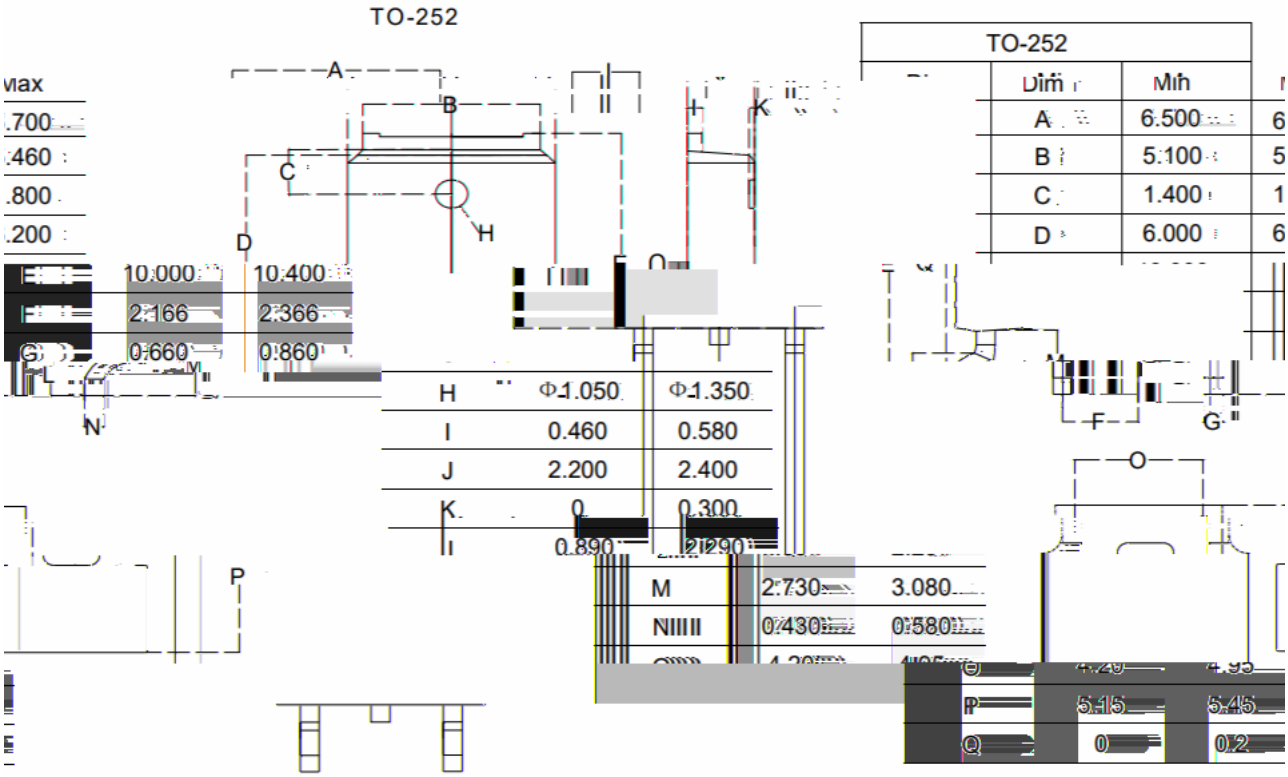

Dimensions in millimeters

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