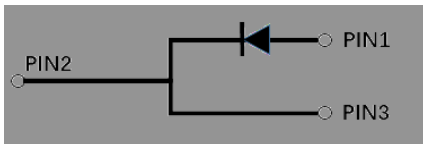
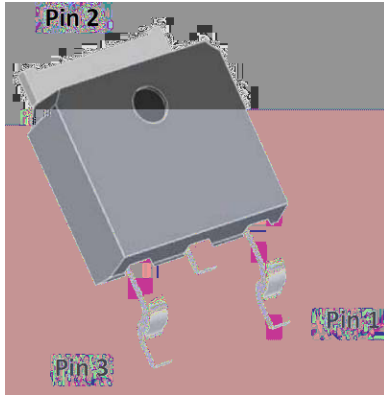


Silicon Carbide Schottky Diode

V_{RRM}	650V
I_F 135°C	11A
Q_C	25nC



Features

- 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

Typical applications are in power factor correction(PFC), solar inverter, uninterruptible power supply, motor drives, photovoltaic inverter, automotive battery chargers.

Mechanical Data

Package: TO-252

Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, halogen-free

Terminals: Tin plated leads

Polarity: As marked

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

PARAMETER	SYMBOL	UNIT	VALUE
Device marking code			D106506DQG2
Reverse voltage (repetitive peak) @ $T_j=25^\circ\text{C}$	V_{RRM}	V	650
Reverse voltage (Surge Peak) @ $T_j=25^\circ\text{C}$	V_{RSM}	V	650
Reverse voltage (DC) @ $T_j=25^\circ\text{C}$	V_{DC}	V	650
Continuous forward current @ $T_c=25^\circ\text{C}$	I_F	A	23
Continuous forward current @ $T_c=135^\circ\text{C}$			11
Continuous forward current @ $T_c=160^\circ\text{C}$			6
Non-repetitive peak forward surge current @ $T_c=25^\circ\text{C}$, $t_p=10\text{ms}$, Half Sine Wave	I_{FSM}	A	65
Power Dissipation @ $T_c=25^\circ\text{C}$	P_{TOT}	W	100
Power Dissipation @ $T_c=110^\circ\text{C}$			43
i^2t Value @ $T_c=25^\circ\text{C}$, $t_p=10\text{ms}$	i^2t	A^2S	21
Operating junction and Storage temperature range	T_j, T_{stg}	$^\circ\text{C}$	-55 to +175



YJD106506DQG2

Electrical Characteristics

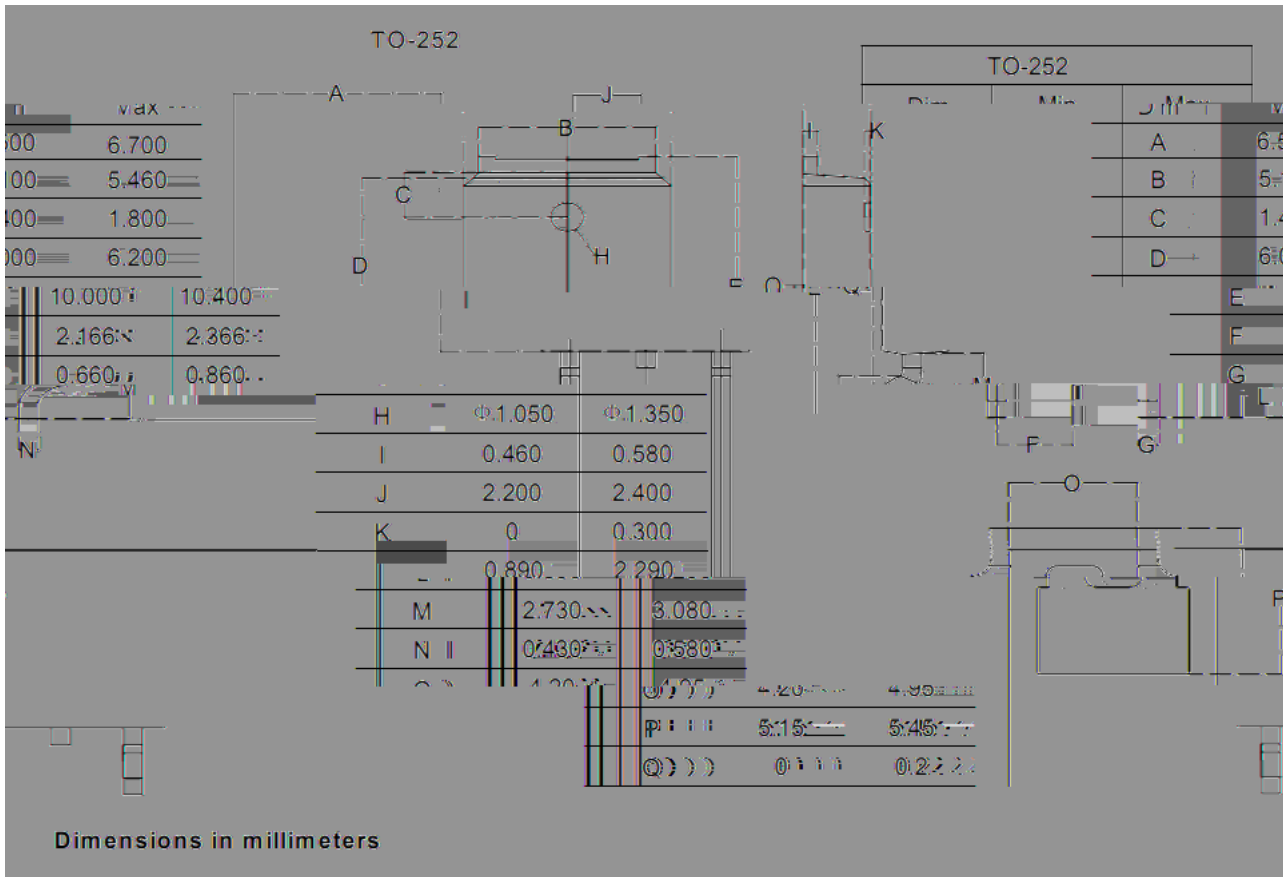
	SYMBOL	UNIT	TEST CONDITIONS	Typ.	Max.
Forward voltage drop	V_F	V	$I_F=6A, T_J=25^{\circ}C$		
			$I_F=6A, T_J=175^{\circ}C$		
Reverse leakage current	I_R		$V_R=60V, T_J$	M	





YJD106506DQG2

Outline Dimensions





Disclaimer

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