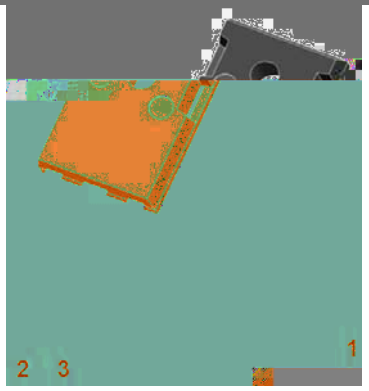
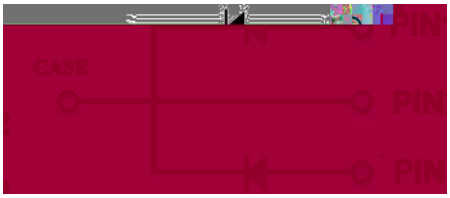
Silicon Carbide Schottky Diode

V_{RRM}	650V
$I_{F\ 135°C}$	52A(2)
Q_C	124nC(2)





Features

- 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
- AEC-Q101 qualified
- 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, electric car and charger.

Mechanical Data

- **Package**: TO-247AB
  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)

PARAMTETER	SYMBOL	UNIT	VALUE
Device marking code			D106540NCTQG2
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			
Power Dissipation@ T_c=110°C			81/158
i^2t Value@ Tc=25°C ,tp=10ms	$\int i^2dt$	A^2S	128(1)
Operating junction and Storage temperature range	T_j ,T_{stg}	°C	-55 to +175

(1) Per Leg, (2) Per Device

v(OHFWULFDO &KDUDFWHULVWLFV

3$5$07(7(5	6<0%2	81,7	7(67 &21',7,21	7\S	0D[
)RUZDUG YROWDJH GURS	)		,) $ M7 f & 9 9		
			,) $ M7 f &		
5HYHUVH OHDNDJH FXUUHQW	5		95 9 M7 f & , $		
			95 9 M7 f &		
7RWDO FDSDFLWLYH FKDUJH	&		95 9 M7 f & 4& &e & 9 G9		

■Typical Characteristics (Device)

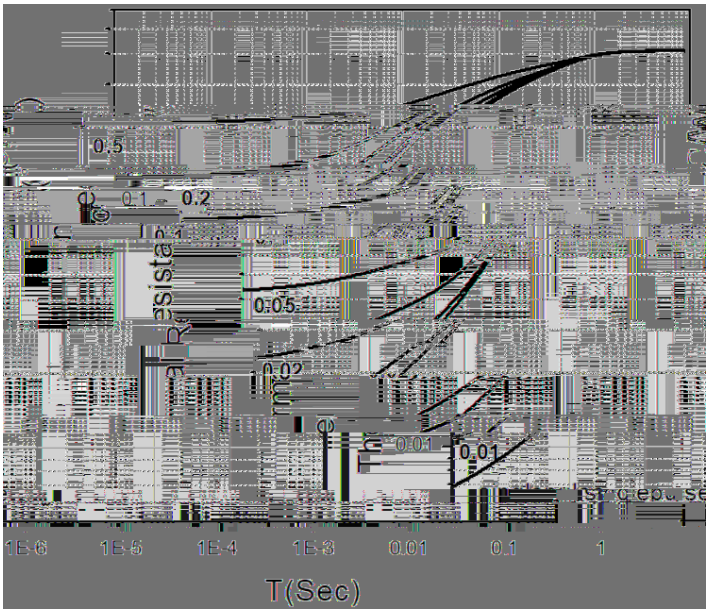


Figure 8. Transient Thermal Impedance

Disclaimer

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 malto . Yjt e iGes a el s