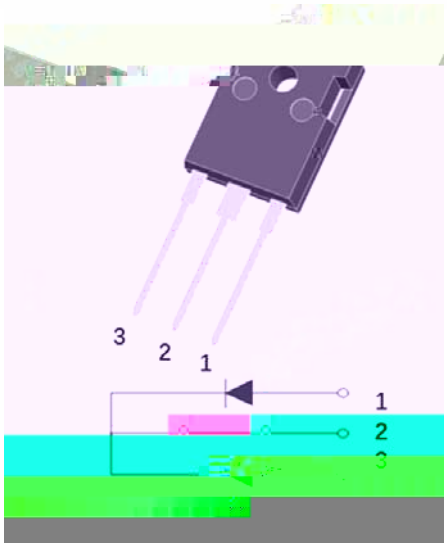
Silicon Carbide Schottky Diode

V_{RRM}	1200V
$I_{F\ 135°C}$	66A(2)
Q_C	228nC(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
- 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
- **Terminals**: Tin plated leads
- **Polarity**: As marked

■Maximum Ratings (T_C=25 Unless otherwise specified

PARAMTETER	SYMBOL	UNIT	VALUE
Device marking code			1200
Continuous forward current @ T_c=25°C (Per Leg/Device)	I_F	A	70/140
Continuous forward current @ T_c=135°C (Per Leg/Device)			33/66
Continuous forward current @ T_c=157°C (Per Leg/Device)			20/40- f î v I D M Ų I ȳ Ş Device)

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

■Electrical Characteristics (Per Leg)

PARAMTETER	SYMBOL	UNIT	TEST CONDITIONS	Typ.	Max.
Forward voltage drop	V_F	V	I_F=20A, T_j=25°C	1.34	1.55
			I_F=20A, T_j=175°C	1.86	2.70
Reverse leakage current	I_R	μA	V_R=1200V, T_j=25°C	0.5	25
			V_R=1200V, T_j=175°C	5	-

■**Typical Characteristics** (Device)

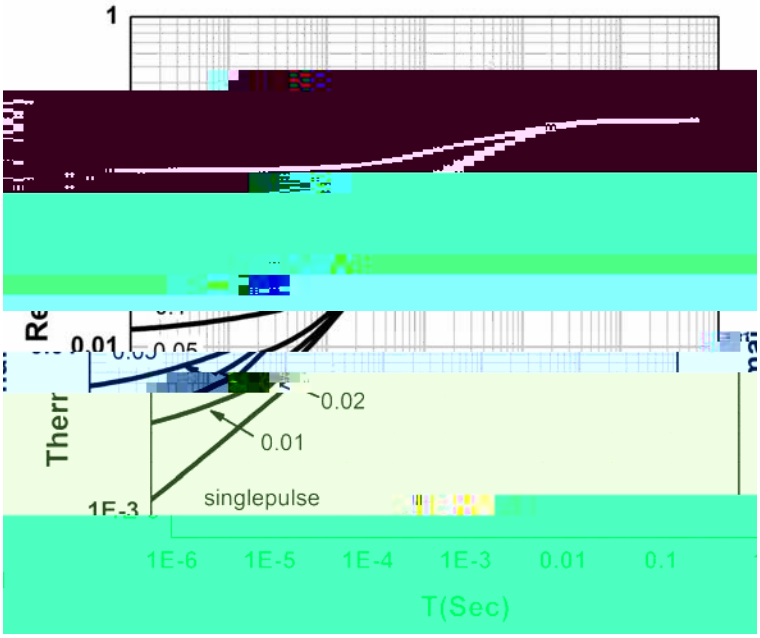
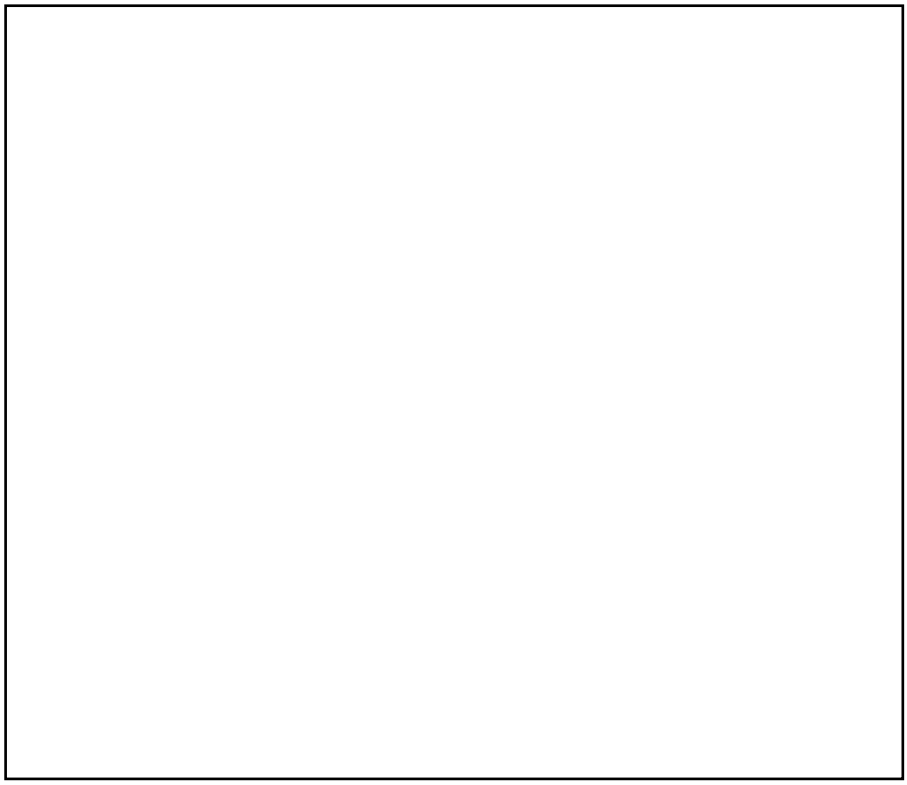


Figure 8. Transient Thermal Impedance

■Outline Dimensions



TO-247AB		
Dim	Min	Max
A	4.80	5.20
A1	2.21	2.61
A2	1.85	2.15
b	1.0	1.4
b2	1.91	2.21
C	0.5	0.7
D	20.70	21.30
D1	16.25	16.85
E	15.50	16.10
E1	13.0	13.6
E2	4.80	5.20
E3	2.30	2.70
L	19.62	20.22
L1	-	4.30
ΦP	3.40	3.80
ΦP1		7.30
S	6.15TYP	
H1	5.44TYP	
b3	2.80	3.20

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 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.