



Silicon Carbide Schottky Diode

Features

Electrical Characteristics (Per Leg)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	Typ.	Max.
Forward voltage drop	V_F	V	$I_F=40A, T_j=25^\circ C$	1.42	1.58
			$I_F=40A, T_j=175^\circ C$	2.02	-
Reverse leakage current	I_R	μA	$V_R=1200V, T_j=25^\circ C$	1	12
			$V_R=1200V, T_j=175^\circ C$	10	-
Total capacitive charge	Q_C	nC	$V_R=800V, T_j=25^\circ C, Q_{C=0} = \int V_R C(V) dV$	211	-
Total capacitance	C	pF	$V_R=0V, f=1MHZ$	3010	-
			$V_R=400V, f=1MHZ$	198	-
			$V_R=800V, f=1MHZ$	155	-
Capacitance Stored Energy	E_C	μJ	$V_R=800V$	55	-

Thermal Characteristics ($T_a=25$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Thermal resistance	R_{J-C}	$^\circ C/W$	0.4 ⁽¹⁾ 0.2 ⁽²⁾

(1) Per Leg, (2) Per Device

Typical Characteristics (Per Leg)

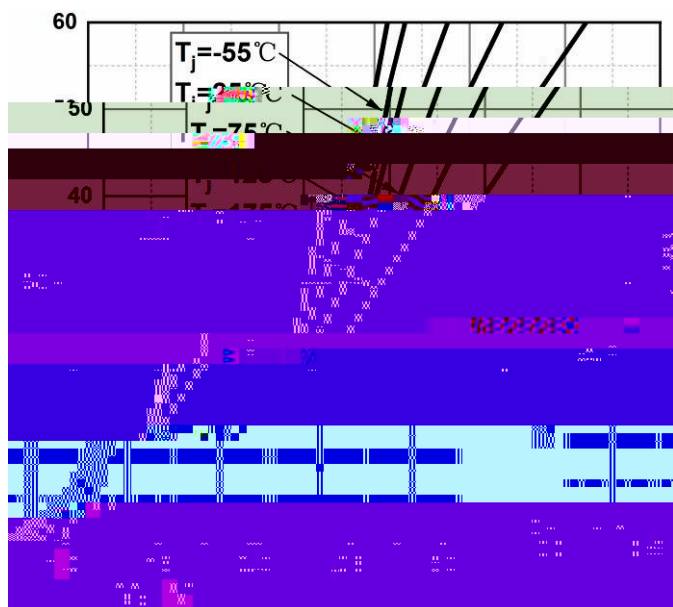


Figure 1. Forward Characteristics

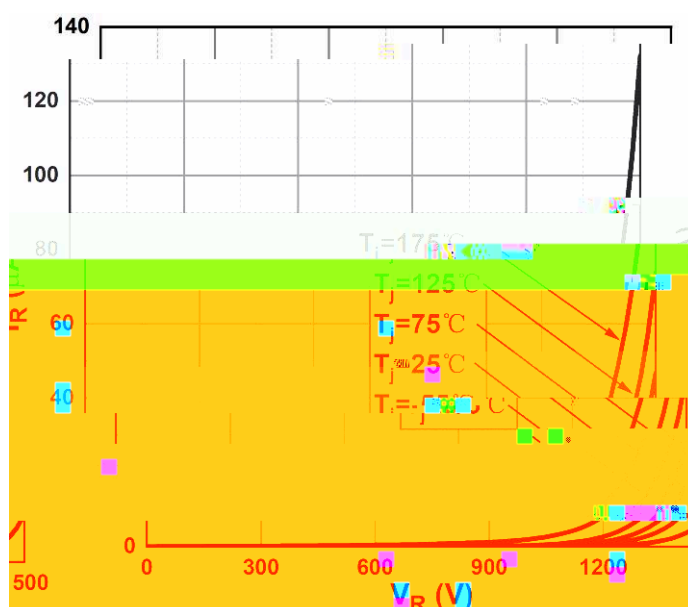


Figure 2. Reverse Characteristics

Typical Characteristics (Device)

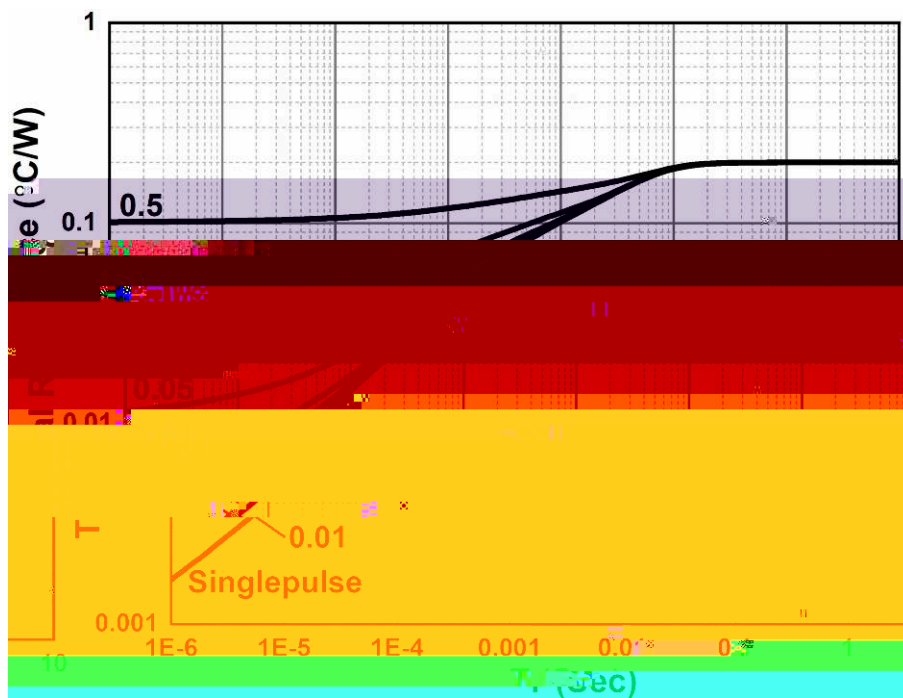


Figure 8. Transient Thermal Impedance

v2XWOLQH 'LPHQVLRQV

:5 62;9



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 which 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 for any damage or injury caused by the use of the product.