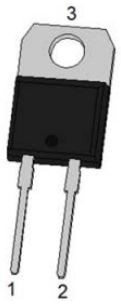
WSRSIC010065NNI

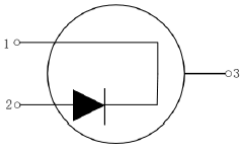
SILICON CARBIDE SCHOTTKY DIODE

Features



- 10A Silicon Carbide Schottky Diode
- Excellent high temperature stability
- Low forward voltage
- High forward surge capability
- 175℃ Operating Junction Temperature
- Reduced temperature dependence

Mechanical Data



- Case: TO-220 Isolated
  --Ceramic Package Provides 2.5KV Isolation
  --Electrically Isolated Package

Absolute Maximum Ratings（Tc=25℃ Unless otherwise specified）

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	650	V
Surge Peak Reverse Voltage	V_{RSM}	650	V
DC Blocking Voltage	V_R	650	V
Maximum Average Forward Rectified Current at TC =150°C	I_F	10	A
Surge(Non-Repetitive)Forward Current @ T_p=10ms Half Sine Wave T_C=25℃	I_{FSM}	70	A
Power Dissipation T_C=25℃	P_{tot}	81	W
Thermal Resistance(between Junction and Case)	$R_{\theta(J-C)}$	1.85（Typ.）	℃/W
Junction and Storage Temperature	T_J T_{STG}	-40 ~ +175	℃

Electronics Characteristics（Tc=25℃ Unless otherwise specified）

Parameter	Symbol	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage @I_F=10A T_J=25℃ Maximum Instantaneous Forward Voltage @I_F=6A T_J=25℃ Maximum Instantaneous Forward Voltage @I_F=10A T_J=175℃	V_F	1.38 1.25 1.89	1.75 / /	V
Total Capacitance @ f=1MHZ T_J=25℃ V_R=0V Total Capacitance @ f=1MHZ T_J=25℃ V_R=200V Total Capacitance @ f=1MHZ T_J=25℃ V_R=400V	C	550 53 48	/	pF
Total Capacitive Charge @ V_R=400V	Q_C	28	/	nC
Reverse leakage current @V_R=V_{RWM} T_J=25℃ Reverse leakage current @V_R=V_{RWM} T_J=175℃	I_R	1.5 12	40 /	μA

Typical Characteristics

Fig.1-Forward Characteristics

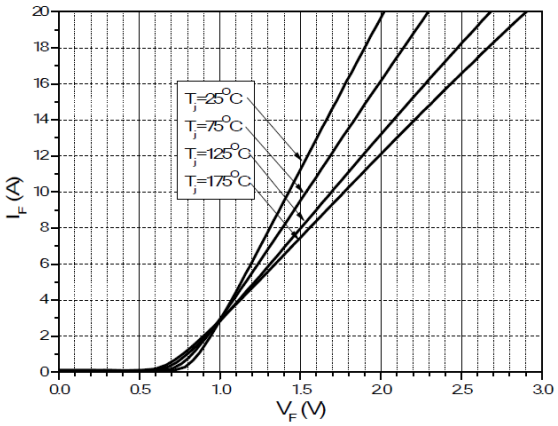
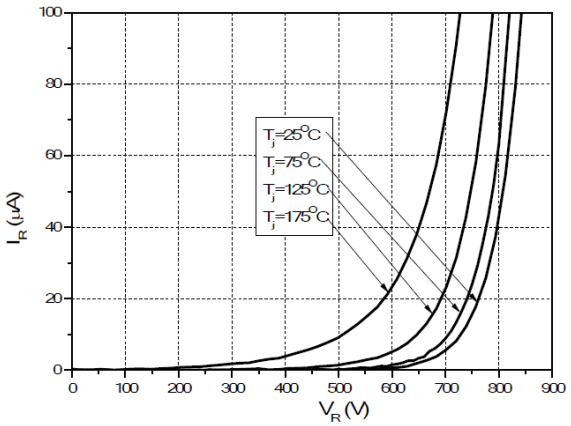


Fig.2-Reverse Characteristics



Typical Characteristics

Fig.3-Total Capacitance Charge VS Reverse Voltage

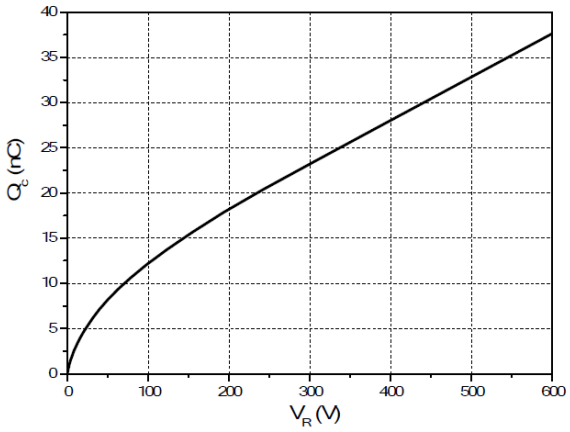
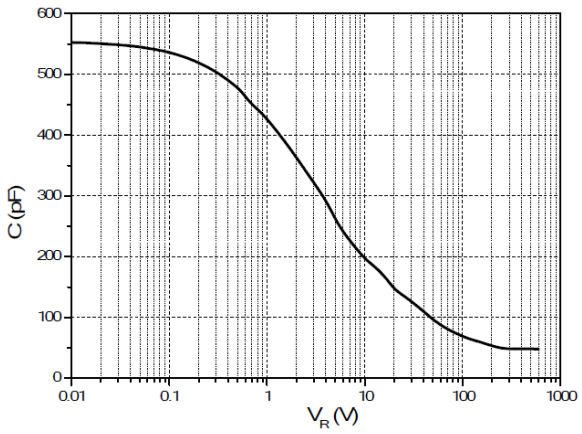
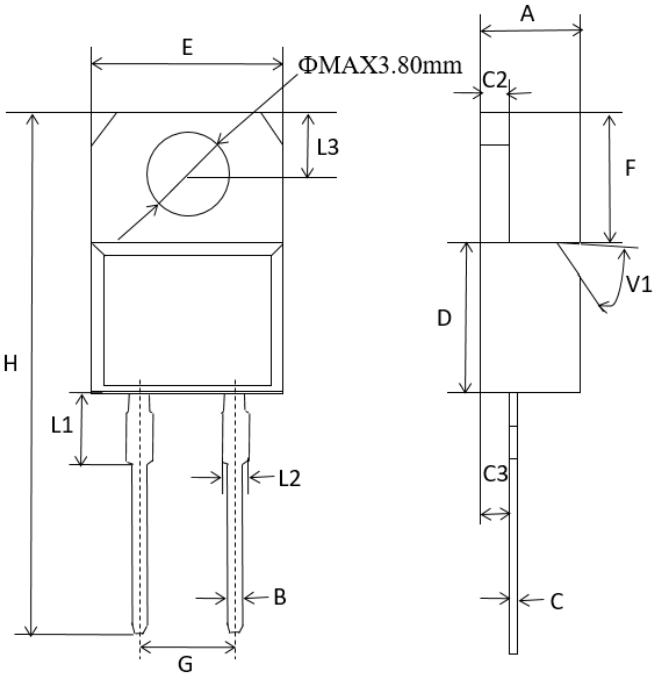


Fig.4-Capacitance VS Reverse Voltage



Outline Drawing

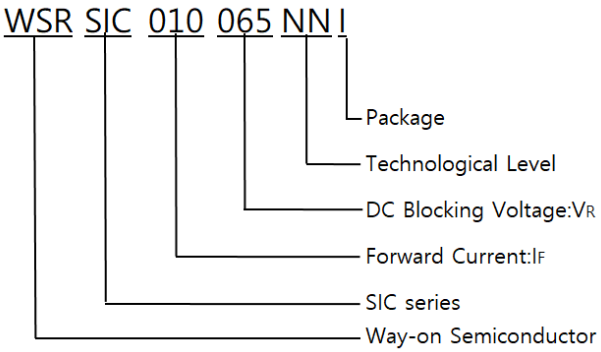
SYMBOL	MM		
	MIN	NOM	MAX
A	4.1	–	4.7
B	0.6	–	0.95
C	0.4	–	0.75
C2	1.1	–	1.45
C3	2.3	–	2.75
D	8.5	–	9.8
E	9.65	–	10.65
F	6.1	–	7.2
G	-	5.08	–
H	27.5	–	29.9
L1	-	3.75	–
L2	1.1	–	1.7
L3	2.5	–	2.95
V1	–	45°	–



Marking Code

Part Number	WSRSIC010065NNI
Marking Code	W010065NNI

Part Number System



Package Information

Quantity per tube: 50pcs

Contact Information

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For additional information, please contact your local Sales Representative.