BRSC06650DP

Rev.A Aug.-2024

DATA SHEET

/ Descriptions

TO-252 SiC

SiC Schottky Barrier Diode in a TO-252 Plastic Package.

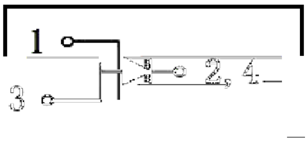
/ Features

Low power loss, high efficiency, HF Product.

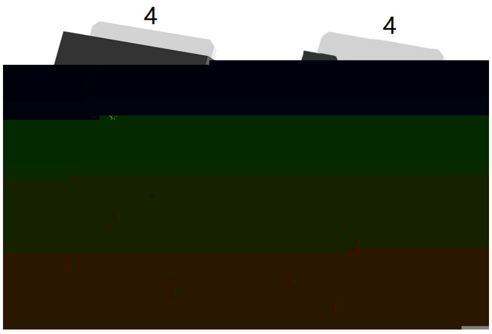
/ Applications

For high frequency, high voltage, high current rectifier diode, freewheeling diode

/ Equivalent Circuit



/ Pinning



PIN1 3 Anode PIN 2 4 Cathode

/ Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	650	V
Maximum RMS Voltage	V_{RMS}	455	V
Maximum DC blocking Voltage	V_{DC}	650	V
Continuous Forward Current,T_C=150	I_F	6	A
Peak forward surge current,tp=8.3ms	I_{FSM}	52	A
Total power disspation	P_D	53	W
Typical Thermal Resistance Junction to Case	R θ JC	2.8	/W
Operation Junction Temperature and Storage Temperature	T_J, T_{STG}	-55~+175	

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit

/ Electrical Characteristic Curve

FIG.1-FORWARD CHARACTERISTICS

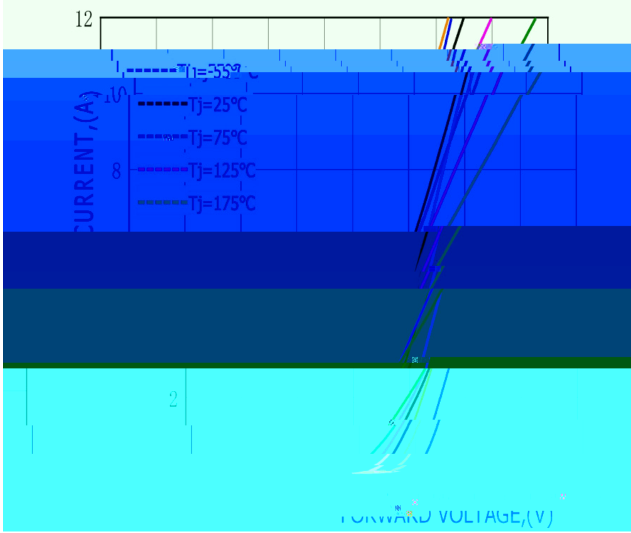


FIG.2-REVERSE CHARACTERISTICS

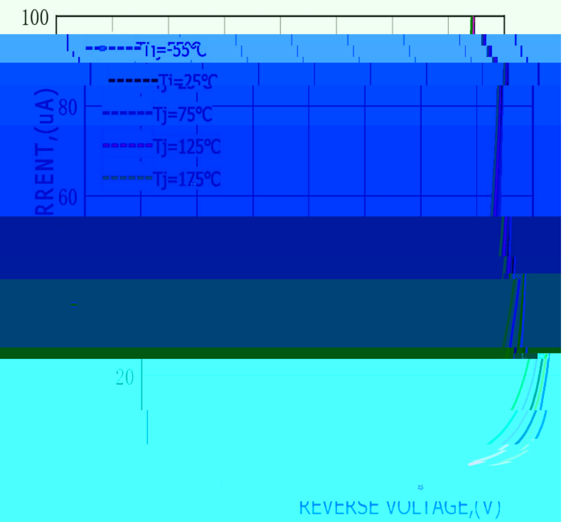


FIG.3-TOTAL CAPACITANCE CHARGE VS REVERSE VOLTAGE

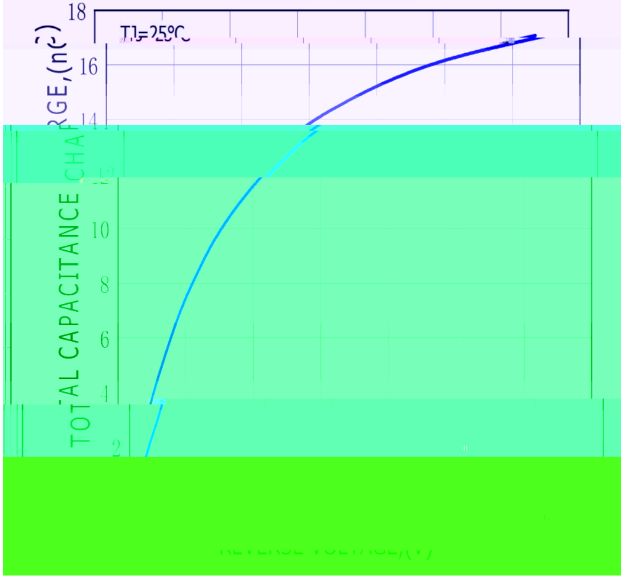
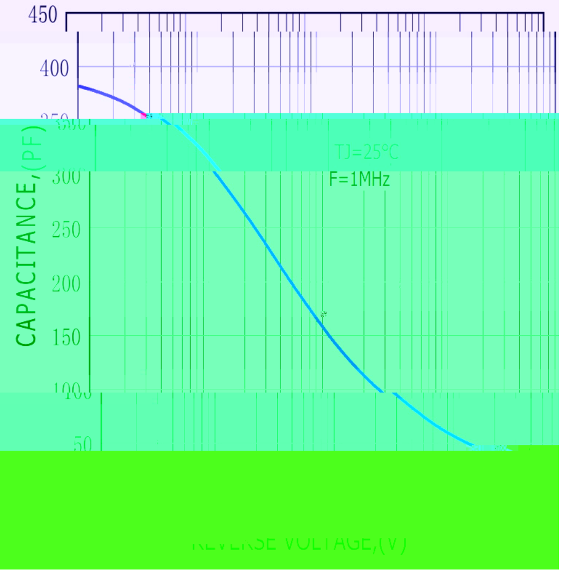
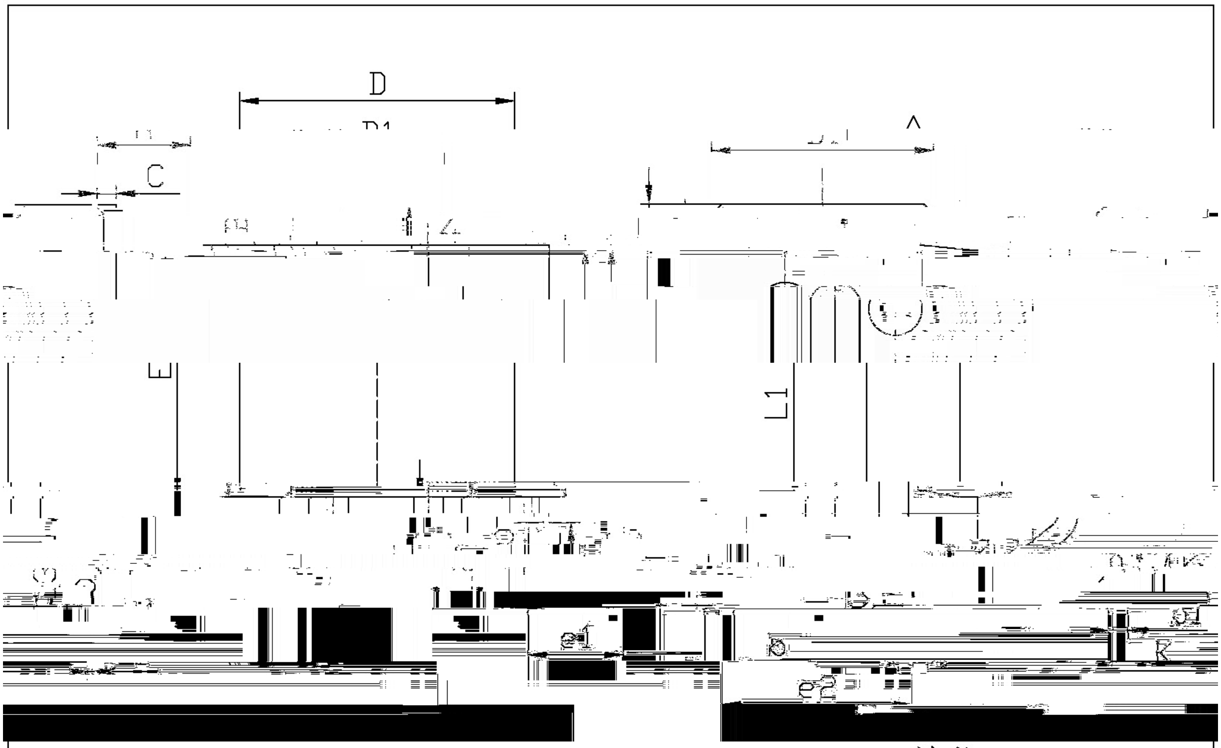


FIG.4-CAPACITANCE VS REVERSE VOLTAGE



/ Package Dimensions



单位：mm

Symbol	Dimensions In Millimeters Min	Max	Symbol	Dimensions In Millimeters Min	Max
A	2.20	2.40	E	5.95	6.25
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
b	0.50	0.90	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95
[illegible]	[illegible]	[illegible]	L2	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	D	6.45	6.75
D1	5.10	5.50	K	0.00	[illegible]

TO-252