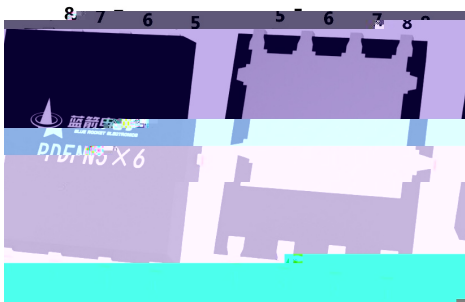
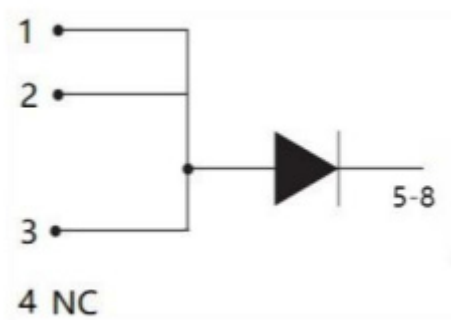


PDFN5 6

SiC Schottky Barrier Diode in a PDFN5×6 Plastic Package.

Low power loss, high efficiency, HF Product.

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

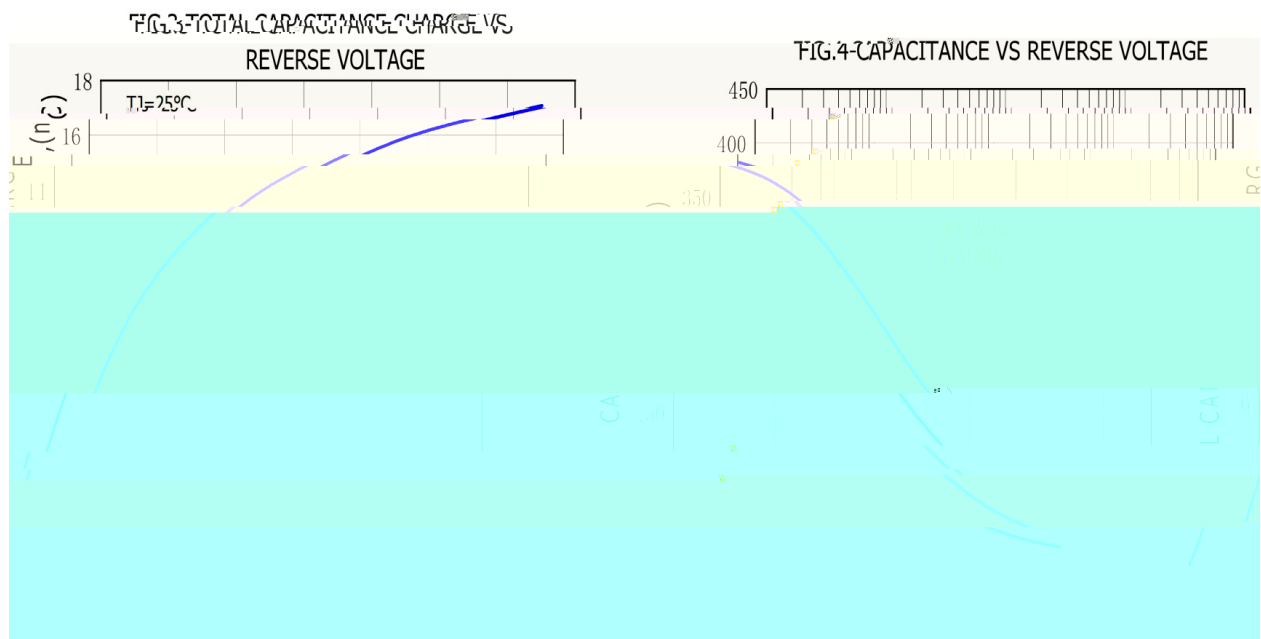
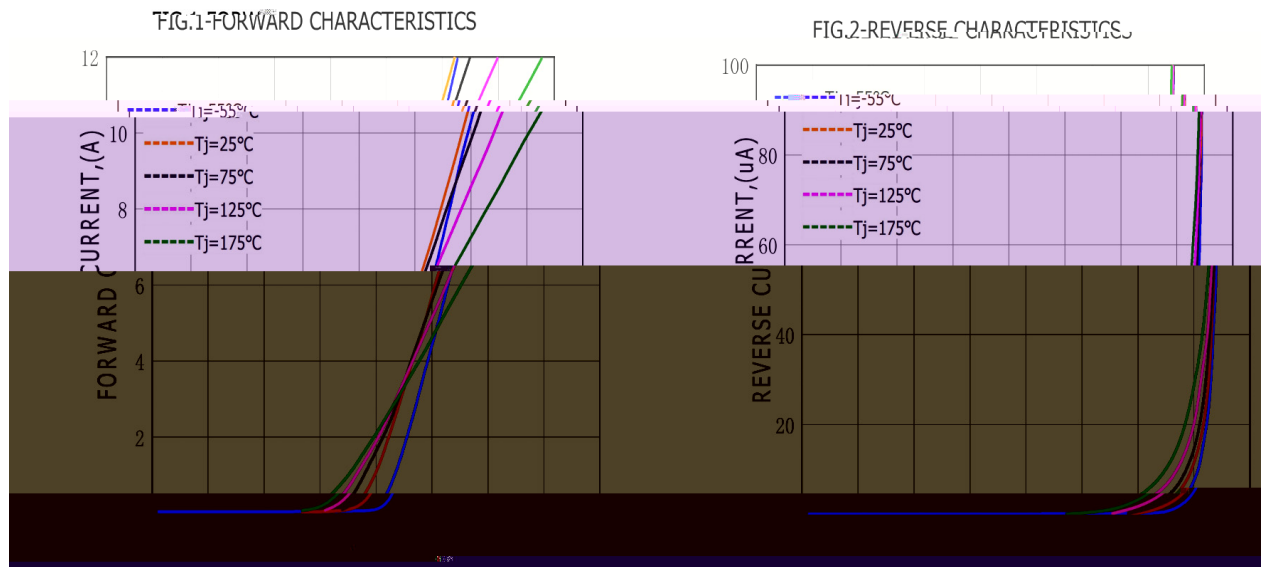


PIN 1,2,3 Anode PIN5-8 Cathode PIN 4 NC

See Marking Instructions.

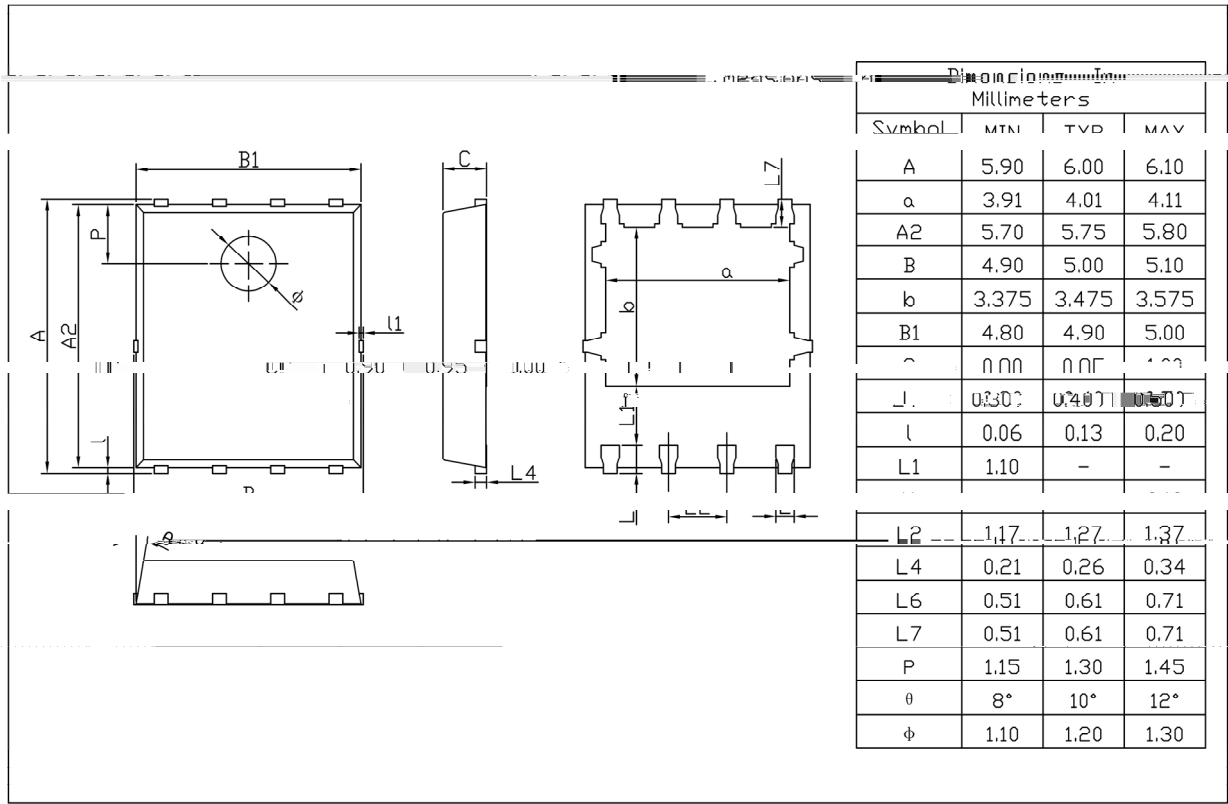
Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	650	V
Maximum RMS Voltage	V_{RMS}	455	V
Maximum DC blocking Voltage	V_{DC}	650	V
Continuous Forward Current, $T_C=150$	I_F	6	A
Peak forward surge current, $t_p=8.3ms$	I_{FSM}	52	A
Total power dissipation	P_D	53	W
Typical Thermal Resistance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

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R		650	-	-	V
Forward Voltage	V_F	$I_F=6A \quad T_C=25$	-	1.27	1.5	
		$I_F=6A \quad T_C=175$	-	1.38	1.6	
Instantaneous Reverse Current	I_R Note 1	$V_R=650V \quad T_a=25$	-	4	50	μA
		$V_R=650V \quad T_a=175$	-	200	200	
Total capacitive charge	Q_C	$V_R=650V, I_F=6A$ $di/dt=200A/\mu s$	-	17	-	nC
Total capacitance	C	$V_R=0V, T_J=25, f=1MHz$	-	230	-	pF
		$V_R=200V, T_J=25, f=1MHz$		39	-	
		$V_R=400V, T_J=25, f=1MHz$	-	28	-	
Capacitance Stored Energy	E_C	$V_R=400V$	-	4.8	-	μJ



PDFN5 X6

Unit:mm



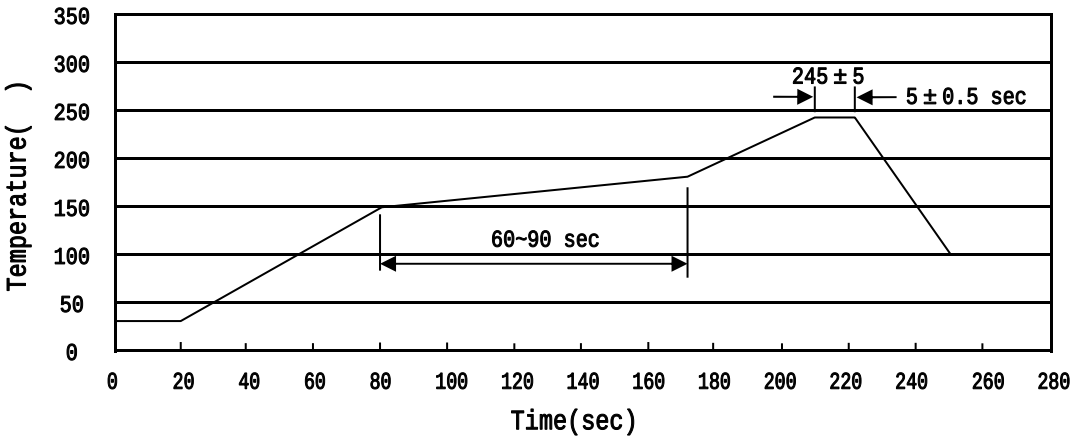
Rev.01 202209



SC06650

Note	
BR	Company Code
SC06650	Product Type Code
****	Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- 1

150 180

60 90sec;

1.Preheating:150~180 , Time:60~90sec.
- 2

245 5

5 0.5sec;

2.Peak Temp.:245 5 , Duration:5 0.5sec.
- 3

2 10 /sec.

3. Cooling Speed: 2~10 /sec.

260 5

10 1 sec.

Temp.:260±5℃

Time:10±1 sec

/ REEL

Package Type	Units					Dimension (unit mm ³)		
PDFN5×6	5,000	2	10,000	6	60,000	13"×12	360×360×50	380×335×366