TO-220F SiC N MOS

SiC N-CHANNEL MOSFET in a TO-220F Plastic Package.

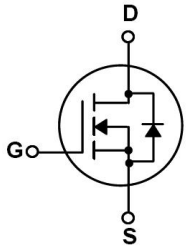
V_{DS}=800V I_D=8.8A

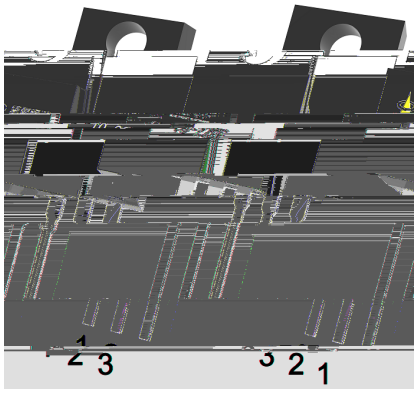
$R_{DS(on)}$@15V≤568mΩ(Type.437mΩ)

$R_{DS(on)}$@18V≤480mΩ(Type. 316mΩ)

LED PD PC

LED driver, PD charger, PC adapter, Air-conditioning, E-bike charger.



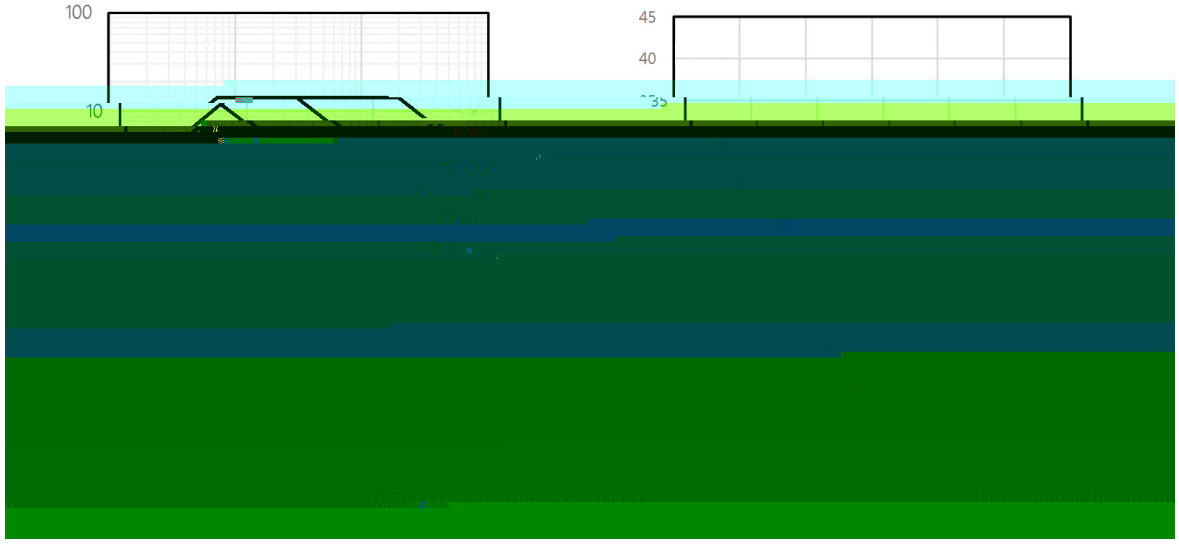


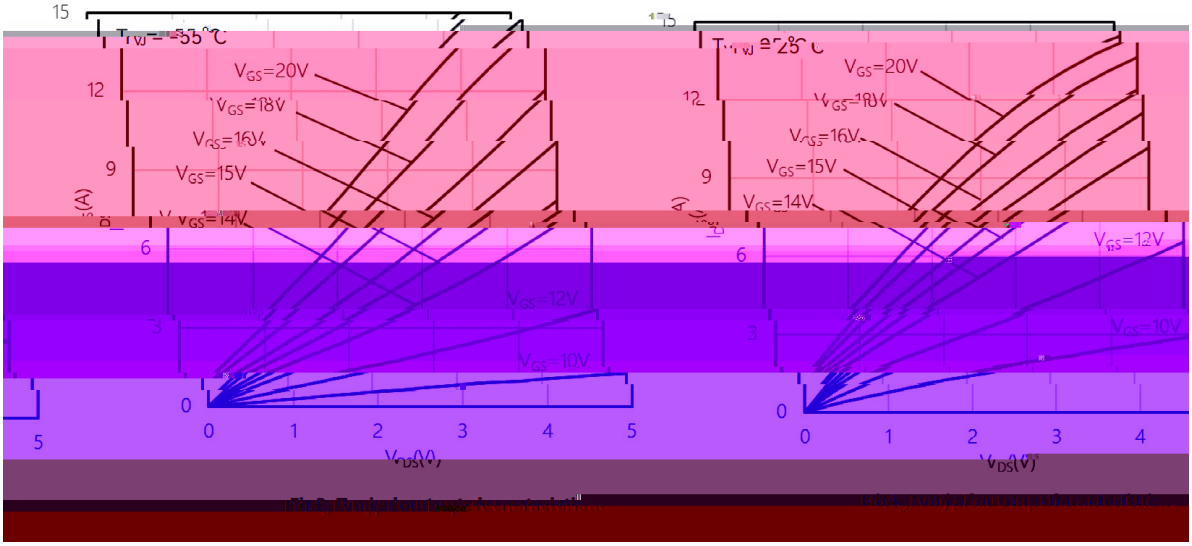
PIN1 G PIN 2 D PIN 3 S

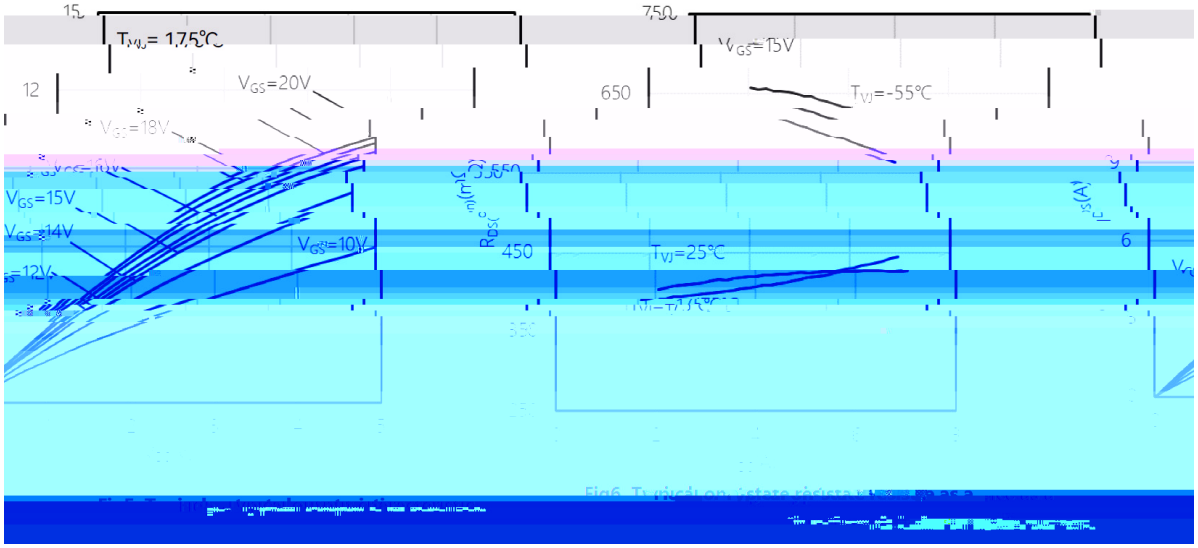
See Marking Instructions.

Parameter	Symbol	Rating	Unit
Drain-Source Voltage	V_{DSS}	800	V
Continuous DC Drain Current for $R_{th(j-c,typ.)}$, Limited by $T_{VJ(max)}$	I_D(Tc=25)	8.8	A
	I_D(Tc=100)	6.8	A
Peak Drain Current, tp Limited by $T_{VJ(max)}$	I_{DM}		

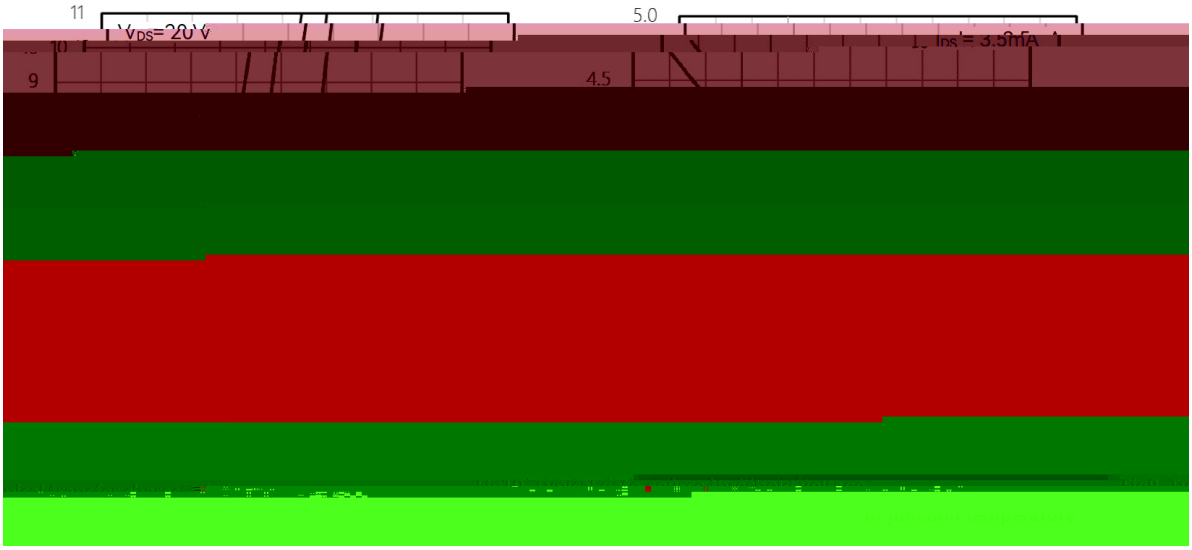
	Min	Typ	Max	Unit

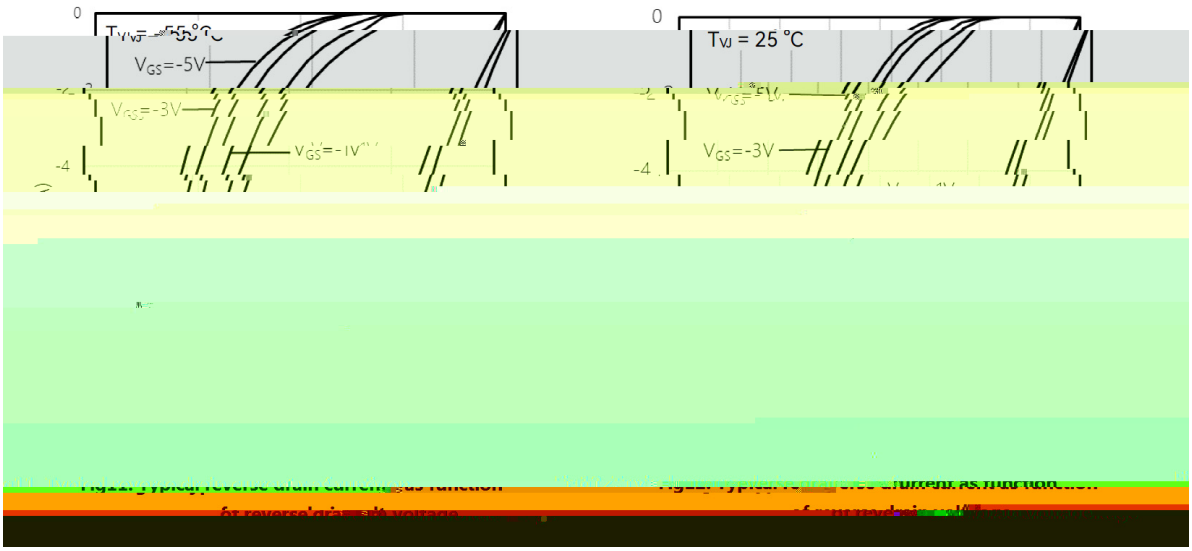

100
10
45
40

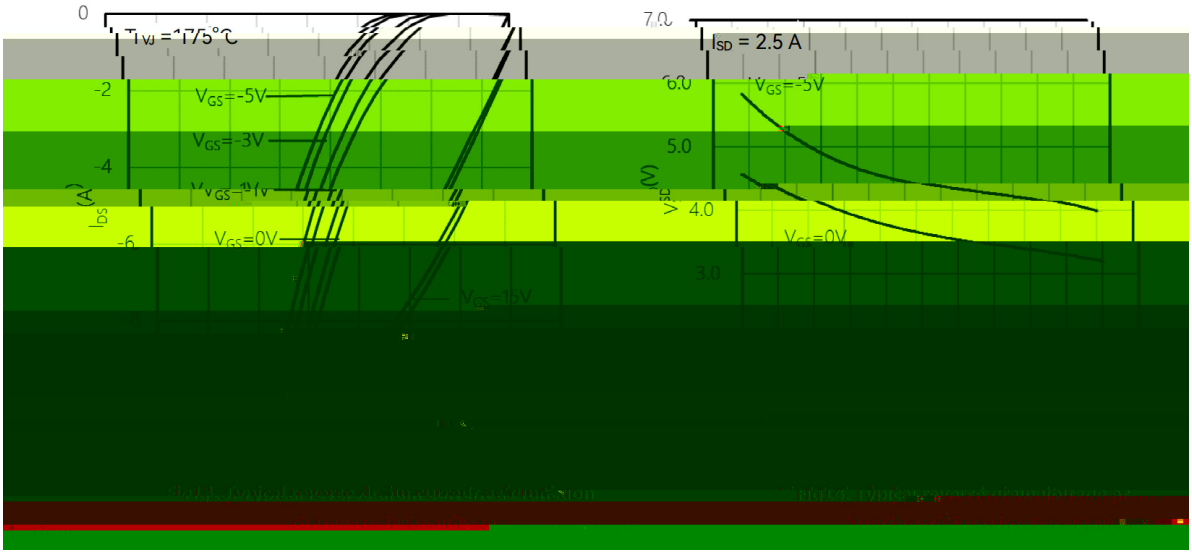

15
12
9
6
3
0
5
0
1
2
3
4
5
V_{GS}=20V
V_{GS}=18V
V_{GS}=16V
V_{GS}=15V
V_{GS}=14V
V_{GS}=12V
V_{GS}=10V
V_{DS}(V)
I_D(A)
T_{VJ}=25°C
0
1
2
3
4

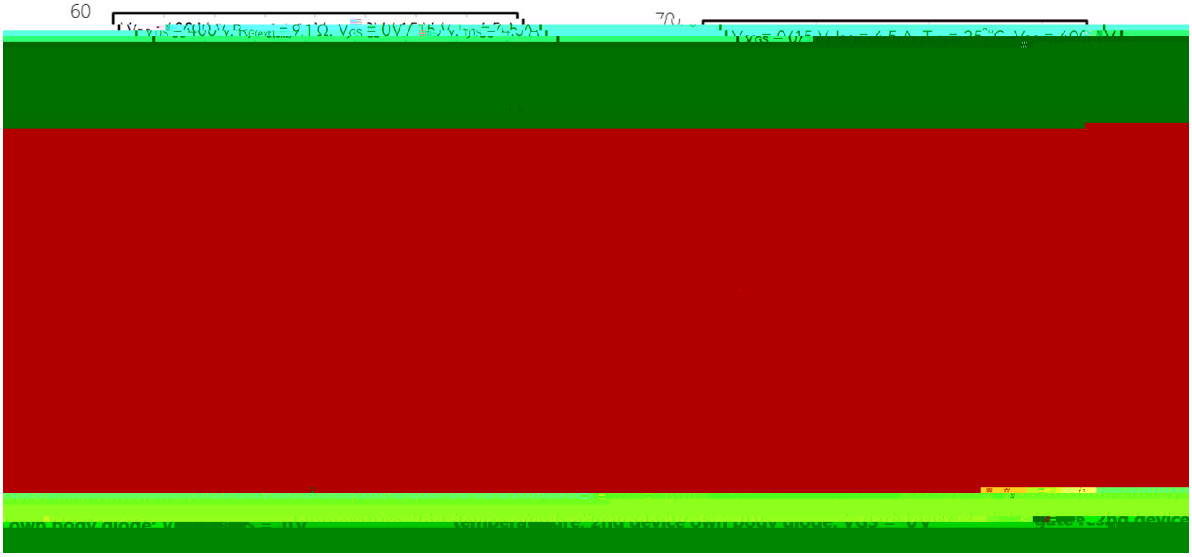

15
12
T_{VJ}= 175°C
V_{GS}=20V
V_{GS}=18V
V_{GS}=15V
V_{GS}=14V
V_{GS}=10V
750
650
450
V_{GS}=15V
T_{VJ}=-55°C
T_{VJ}=25°C
6


725
1500


11
9
5.0
4.5


0
VGS=-5V
VGS=-3V
VGS=-1V
-4
0
TVJ = 25 °C
VGS=-3V
-4



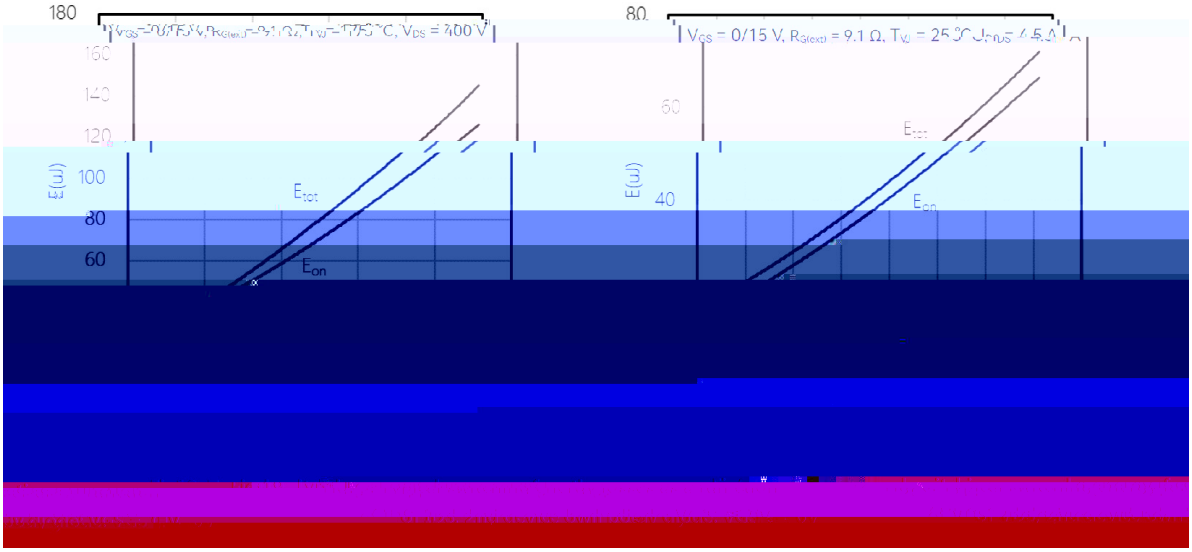




Typical switching energy losses as a function of esistance. 2nd device own body diode: VGS = 0V.

Fig18. Typical switching energy losses as a function of IDS. 2nd device own body diode: VGS = 0V.

Fig17. gate r



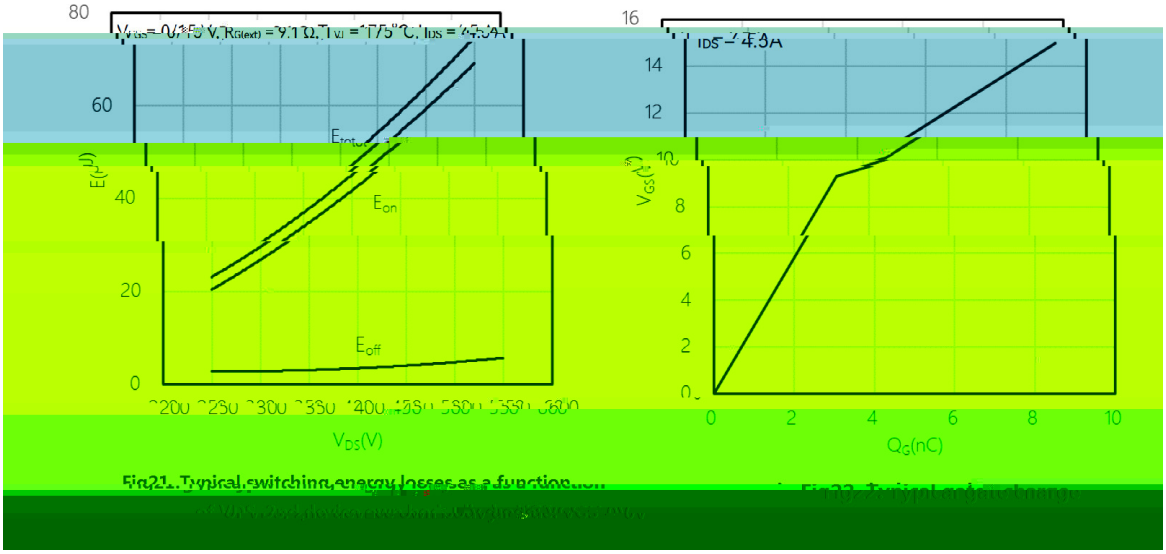


Fig21. Typical switching energy losses as a function...

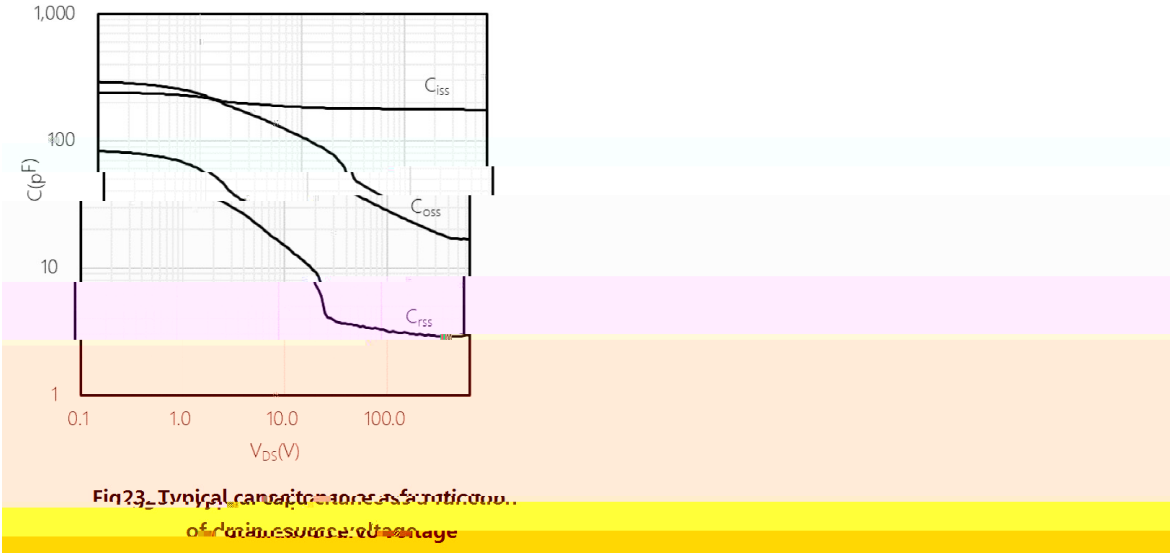
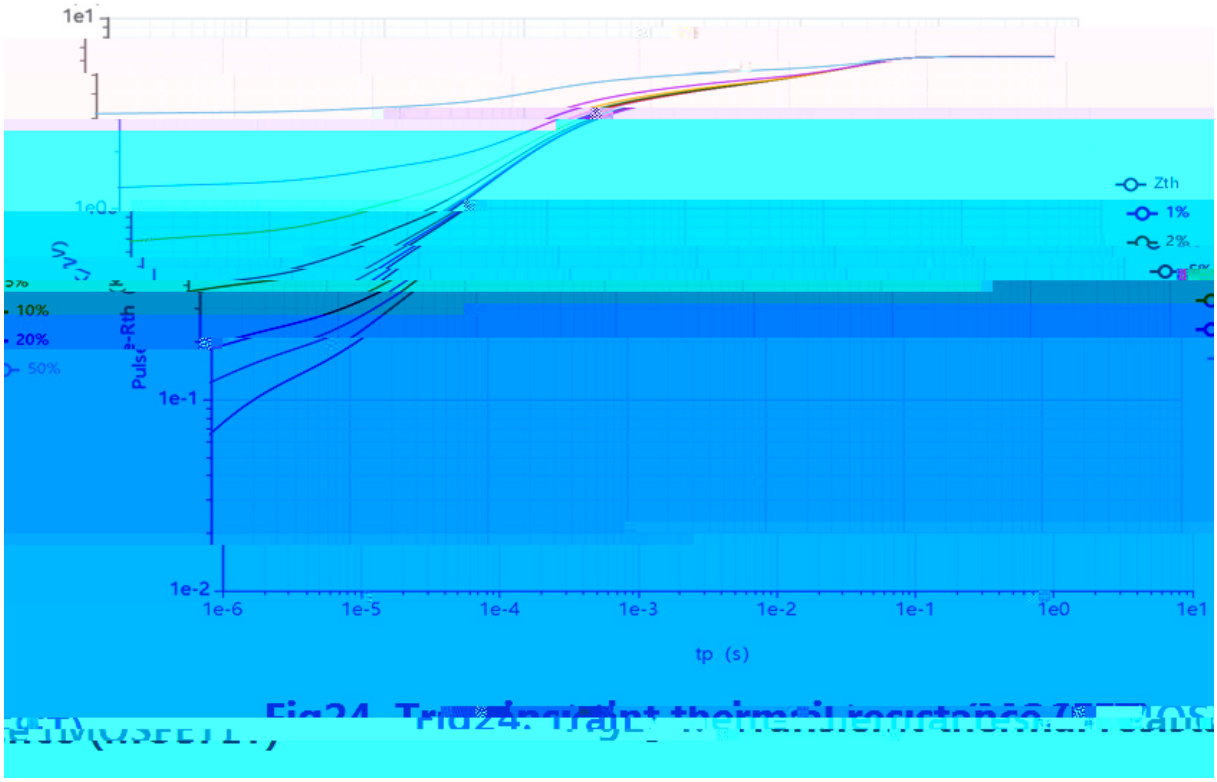
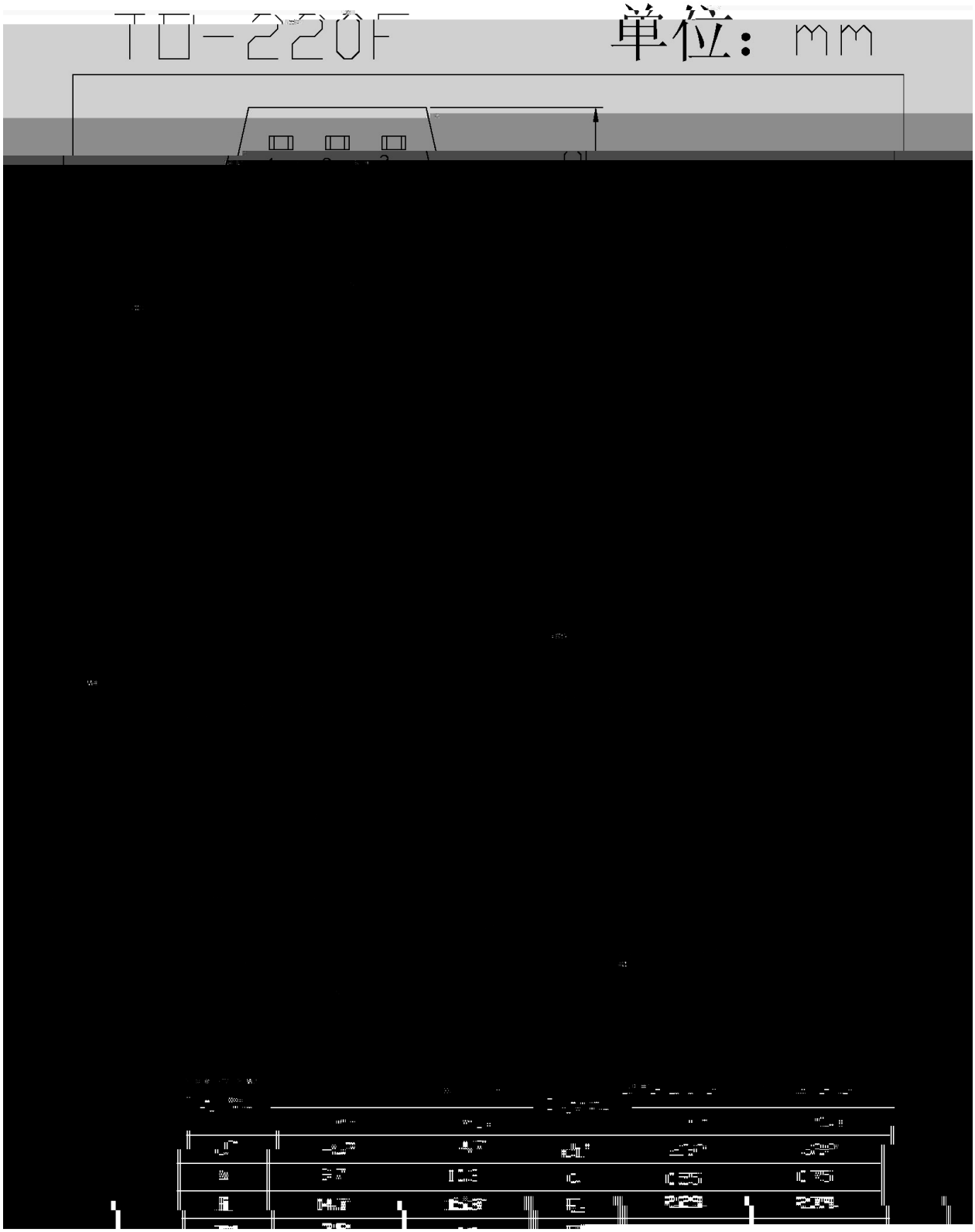
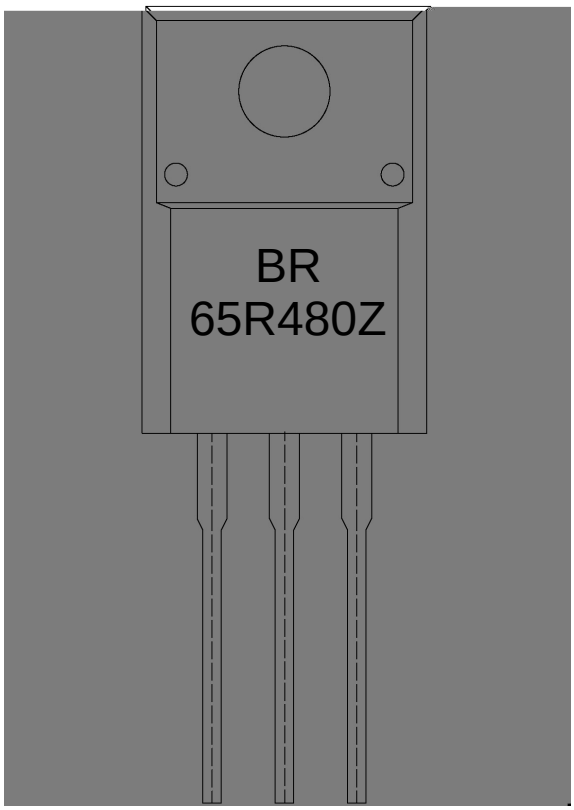


Fig23. Typical capacitances as a function...


1e1
1e0
1e-1
1e-2
1e-6
1e-5
1e-4
1e-3
1e-2
1e-1
1e0
1e1
tp (s)
Zth
1%
2%
10%
20%
50%

TO-220F 单位：mm





BR

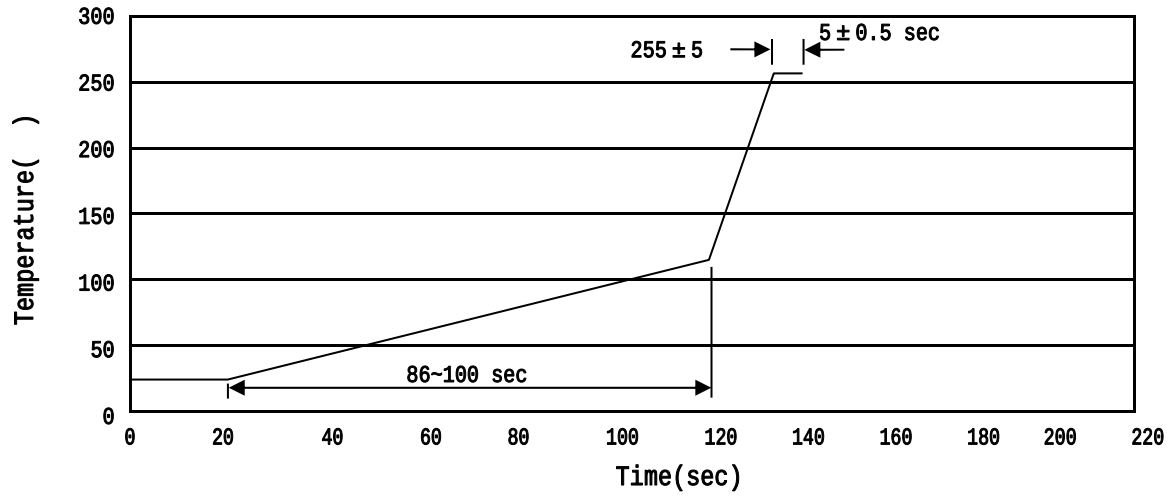
65R480Z

SC

****

Note:

BR:	Company Code
65R480Z:	Product Type Code
SC:	SiC
****:	Lot No. Code, code change with Lot No.



Note:

1 25 150 60 90sec;

1.Preheating:25~150 , Time:60~90sec.

2 255±5 5±0.5sec;

2.Peak Temp.:255±5 , Duration:5±0.5sec.

3 2 10 /sec.

3. Cooling Speed: 2~10 /sec.

270±5 10±1 sec. Temp.:270±5 Time:10±1 sec

/ BULK

Package Type	Units					Dimension		(unit mm³)
	Units/Bag /	Bags/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Bag	Inner Box	Outer Box
TO-220/F	200	10	2,000	5	10,000	135×190	237×172×102	560×245×195

/ TUBE

Package Type	Units					Dimension		(unit mm³)
	Units/Tube /	Tubes/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Tube	Inner Box	Outer Box
TO-220/F	50	20	1,000	5	5,000	532×31.4×5.5	555×164×50	575×290×180

All information provided in this document is subject to legal disclaimers.