S3M013120HK-A

TriQSiC™1200V Silicon Carbide Power MOSFE

Features

-
-
-
-
-

Benefits

-
-
- G PZ



Table of contents

Features 1

Benefits 1

Applications 1

Table of contents 2

1 Maximum ratings 3

2 Thermal characteristics 3

3 Electrical characteristics 4

3.1 Static characteristics 4

3.2 Dynamic characteristics 4

3.3 Switching characteristics 5

4 Electrical characteristic diagrams 6

5 Package drawing (TO-247-4L-A) 11

6 Test conditions 12

Revision history 13

Attention 13

3 Electrical characteristics

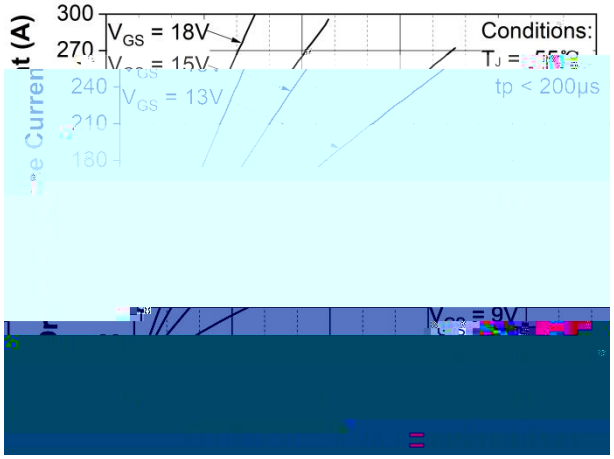
3.1 Static characteristics

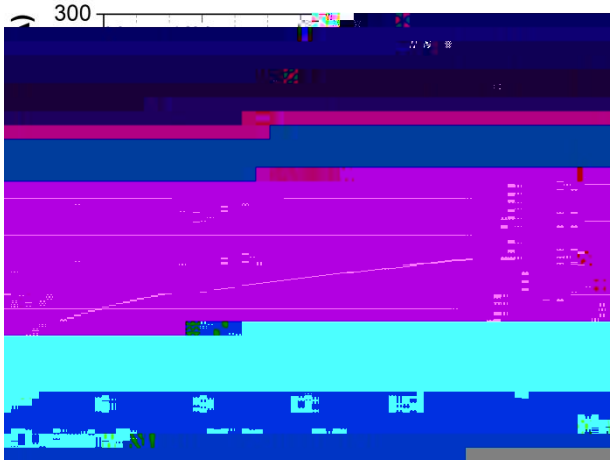
Table 4 Static characteristics

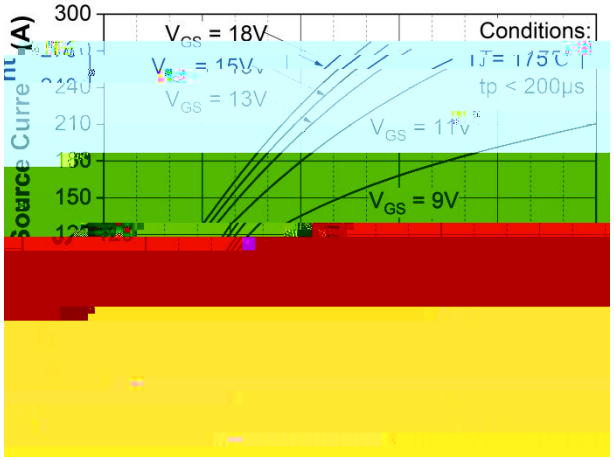
Symbol	Parameter	Min.	Typ.	Max.	Unit	Test Conditions	Note

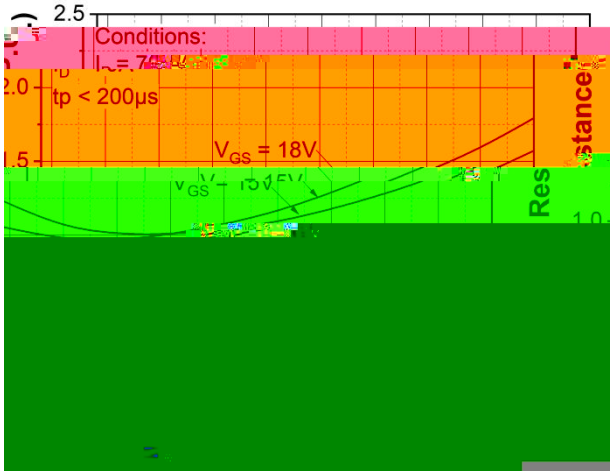
S3M013120HK-A

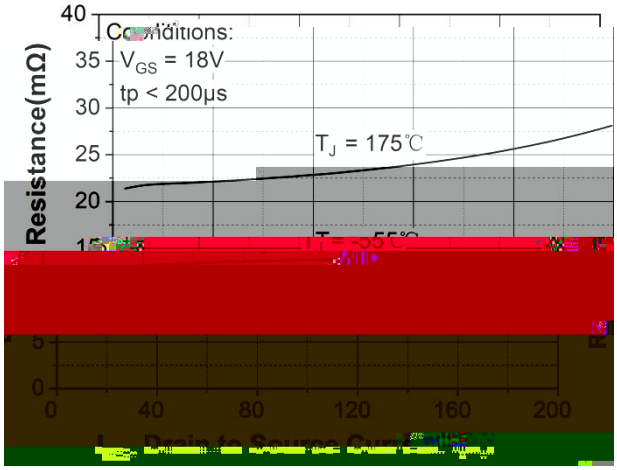
4 Electrical characteristic diagrams

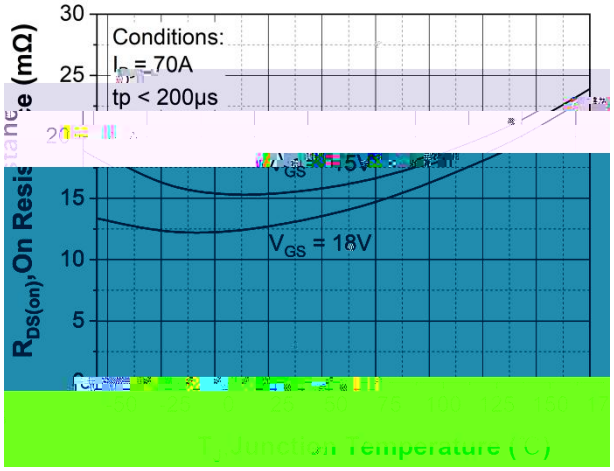




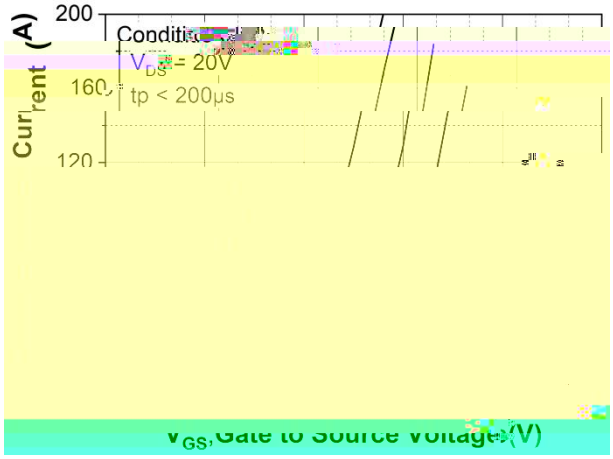


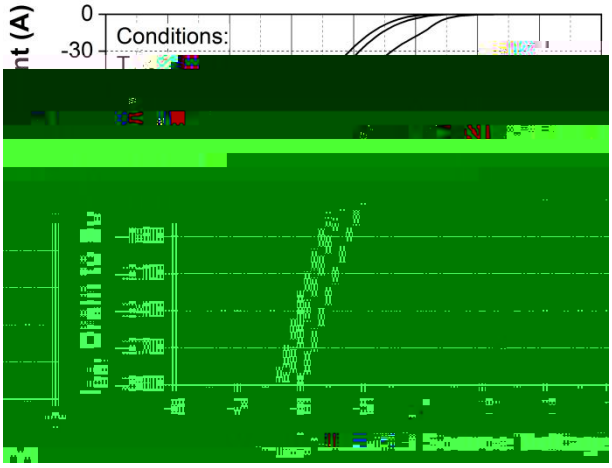


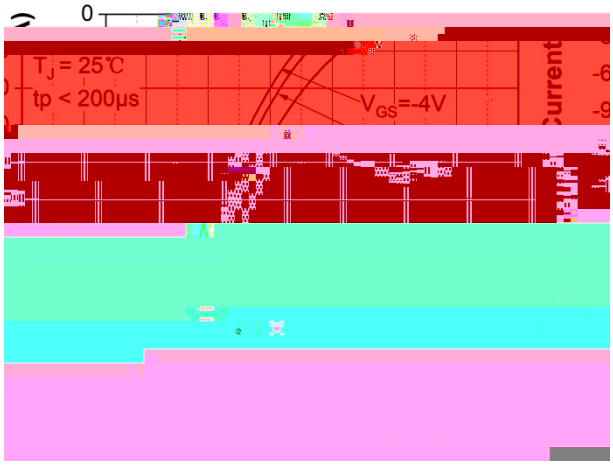




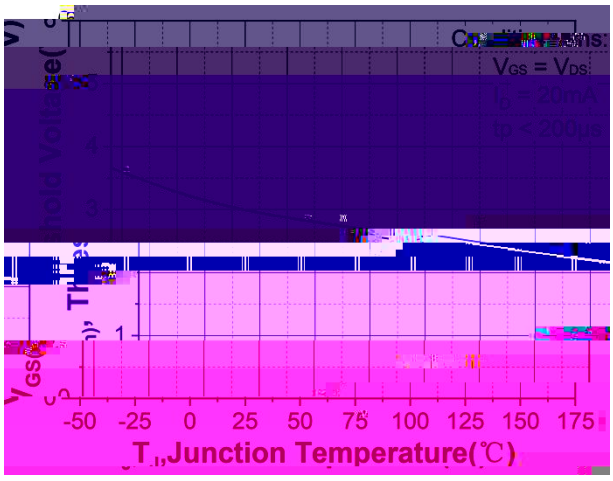
S3M013120HK-A

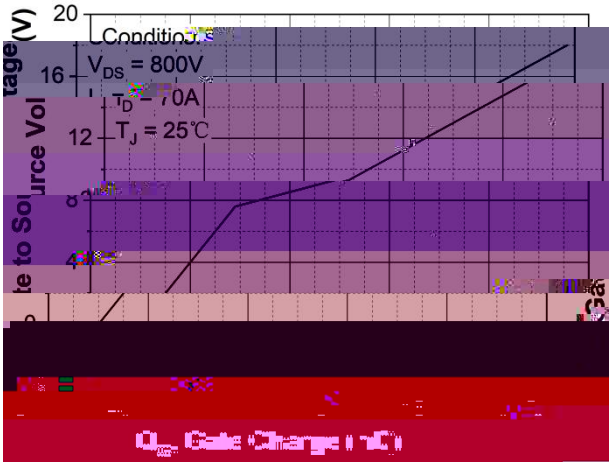




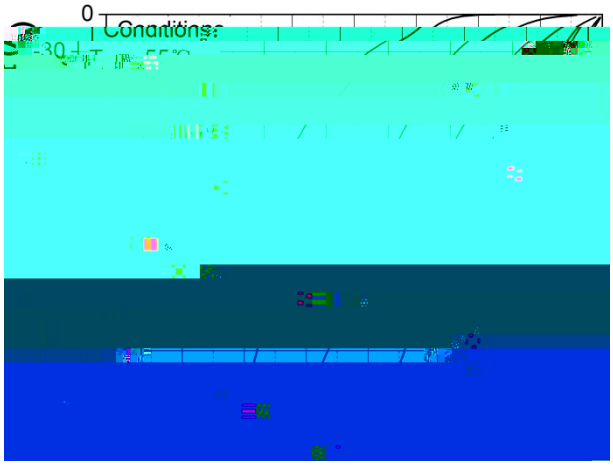


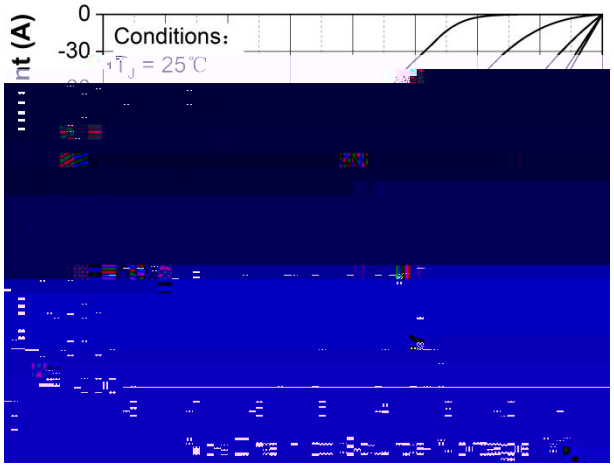


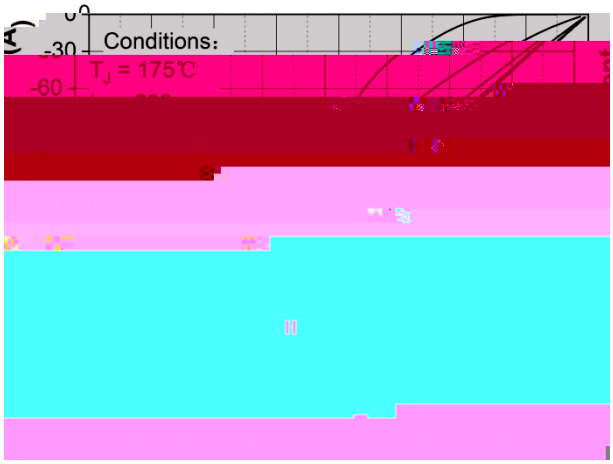


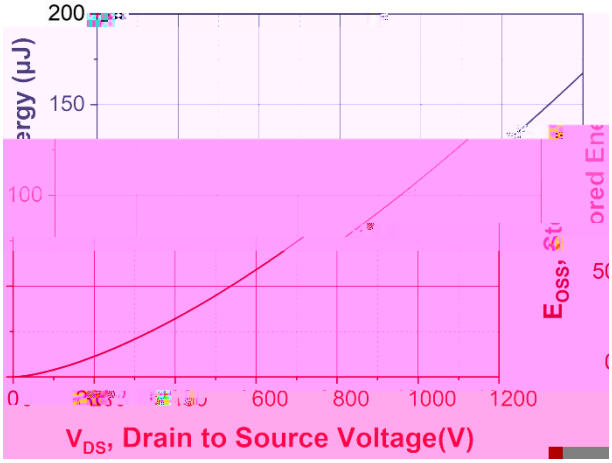


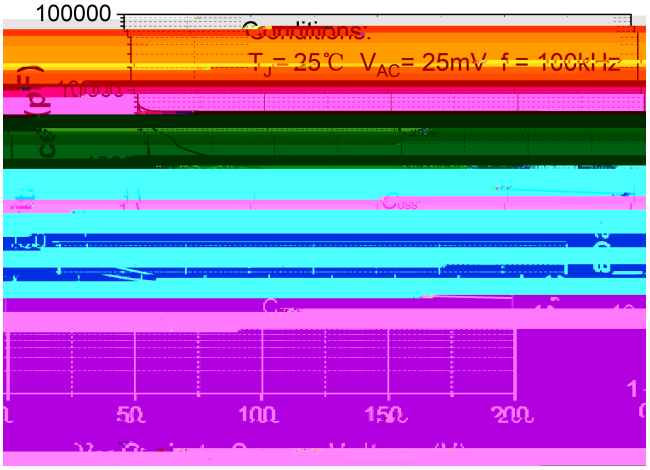
S3M013120HK-A

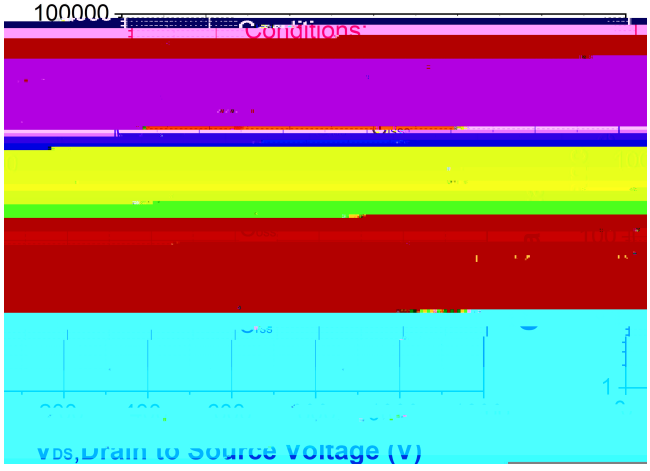




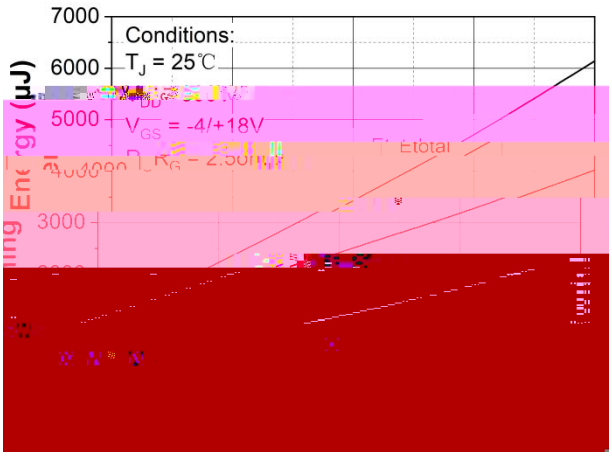




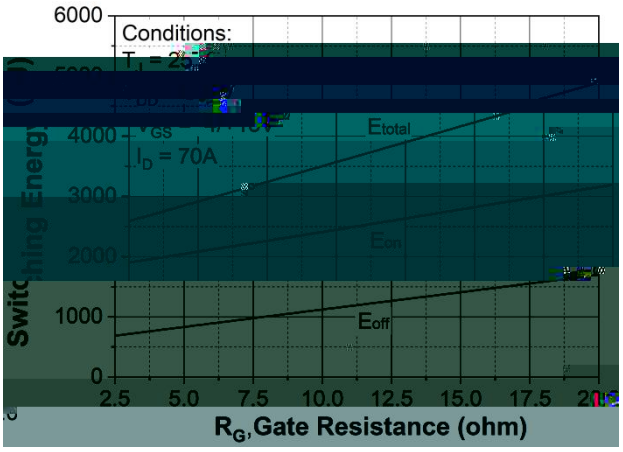


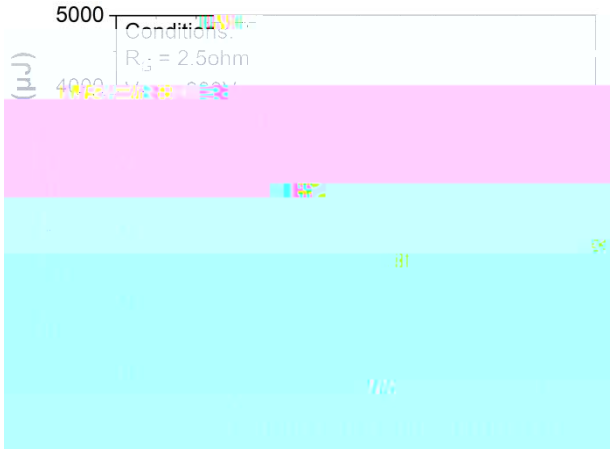


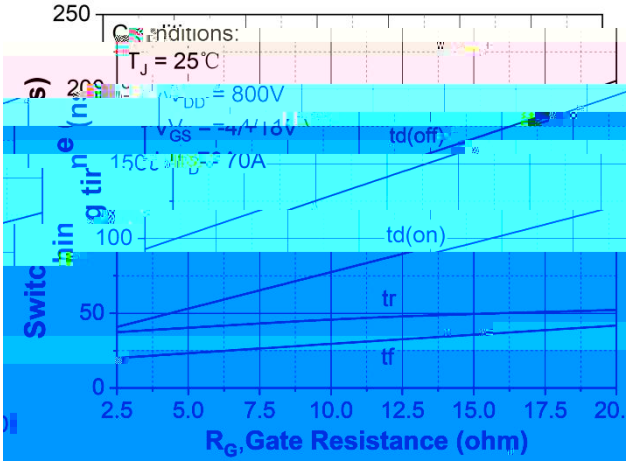
S3M013120HK-A



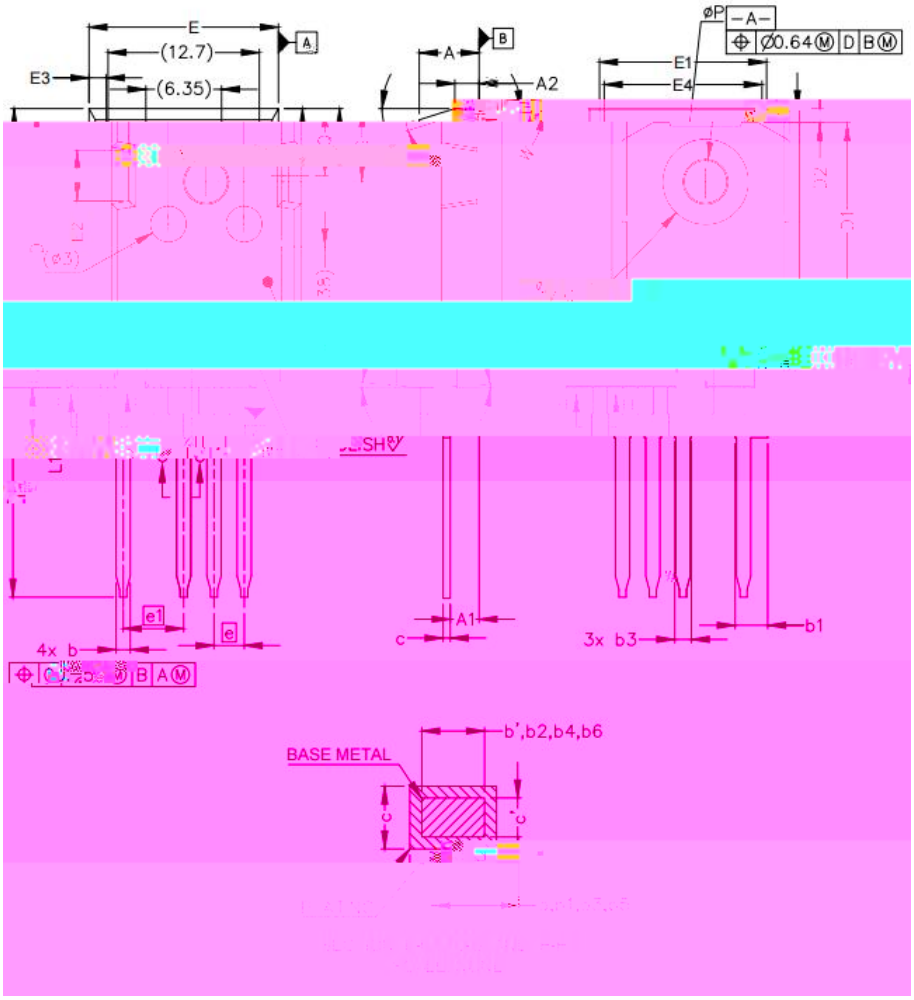
S3M013120HK-A





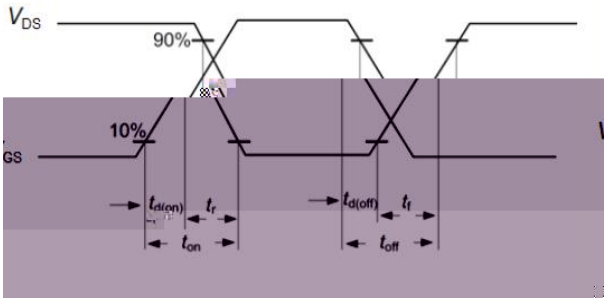


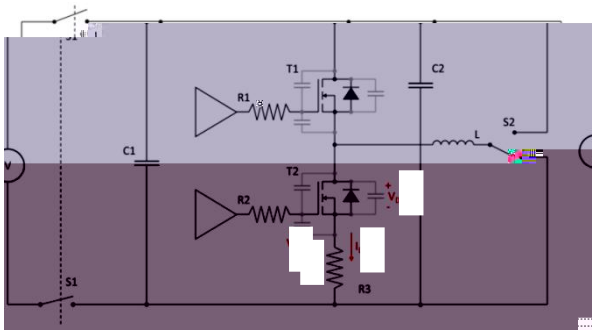
5 Package drawing

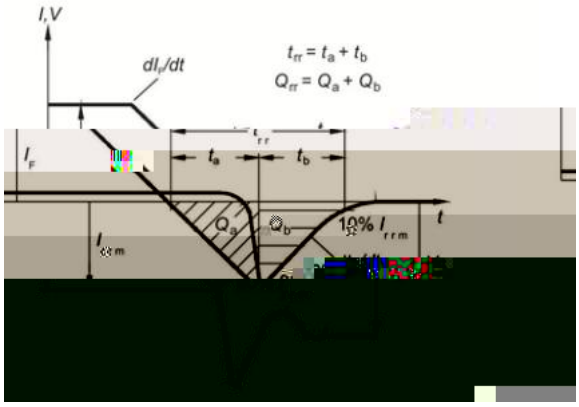


SYMBOL	MILLIMETERS	
	MIN	MAX
A	4.83	5.21
A1	2.29	2.54
A2	1.91	2.16
b'	1.07	1.28
b	1.07	1.33
b1	2.39	2.94
b2	2.39	2.84
b3	1.07	1.60
b4	1.07	1.50
b5	2.39	2.64
b6	2.39	2.64
c'	0.55	0.65
c	0.55	0.68
D	23.30	23.60
D1	16.25	17.65
D2	0.95	1.25
E	15.75	16.13
E1	13.10	14.15
E2	3.68	5.10
E3	1.00	1.90
E4	12.38	13.43
e	2.54 BSC	
e1	5.08 BSC	

6 Test conditions







S3M013120HK-A

1200V SiC Power MOSFET

Revision history

Document version	Date of release	Document stage	Description of changes
V01_00	2026-06-29	Final	——

Attention

RoHS compliance

REACH compliance

S3M013120HK-A