

“十五” 划“

专 2022

(征求意见稿)



1.

1.1

350 /

1200 /

2

500 /

600

600 /

200

1. 2



240 / 470 /  
10 /50 8 /80

1000

3%

3

1

2

4

**1.4**

80  
600 / 700 /  
65% 50% -40 -30  
50% 30 7000  
10% 10000 /  
/ 1

0.6 @3.0 / 5.5 /  
60 / -40 40 /  
5000  
5% 15  
- @  
600 /

1.5

DC/DC

EMC

300  
 550 / 600 /  
 60% 50% 95 -40  
 -30 3000  
 20% 20000  
 10% 1000  
 10000 / / 1  
 200  
 3.0 / 4.0  
 / 95 -40 20000  
 10%  
 700 /



1

75

100

4

## 2.2

SiC

-

SiC-MOSFET

SiC

1200

SiC MOSFET

250

/

200

SiC MOSFET

5

0.06

/

1200

/

450

200

220

/

50

220

140

0.42

/

800

120

125

1.5

/

@500

0.6

/

@900



SiC MOSFET 45

/ 99.0%

50

4

3.

**3.1**

/ /

L3

30

L3

2T /W

<150

100

1

80

90%

20

/

3

/ /

**3.2**

1

1

1

20

95%

1

20

10

100

1

300

1000

1

3

1

### 3.3

Ù

)Í P 7u\$6`• 0

0.5g  
100  
0.5  
0.1  
<3%  
540 500 / 5 5%  
20  
2 3

4.

**4.1**

10  
5  
45  
15%  
5%  
10  
15%  
25%  
1  
10%  
3  
2  
10  
10  
20  
5  
30  
150  
30

5.

**5.1**

				80	/
					55
/			0.02		0.1 /
		1			0.02
	0.02	/		0.1	100
				1600	/
0.02				750	/
	2				
	15	/		1	GMSL
HDMI	CAN/CAN-FD				

40

0.1

1

30 /

3

30

**5.2**

1



		10		500
	4			
	5 2500	6		5 100
/	4		15 100	3
		5		
	5	0 120	/	
0 80	/			
				1
		1		
800	6		10	1
		4		
				10
	1			5
50		40		200 /
			10	50
				4
5		100	/	
	15		/	5

6.

**6.1**

2.0

20%

35%

85%

5

10

1.5GPa

2.0

20%

45%

800 450

12

650 350

24

55%

50

95%

480

80%

1

100

85%

CAE

2

1

7500

4

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CAE Computer Aided Engineering

EMC Electromagnetic Compatibility

FIT Failure Time

FTTH Fiber To The Home

L3 Level 3

SiC MOSFET Silicon Carbide Metal-Oxide-Semiconductor

Field-Effect Transistor

Tea Oolong Tea Second