





SiC MOSFET

SiC MOSFET

P.133

SiC MOSFET

● SiC MOSFET一览表

V _{DSS} (V)	R _{DS(on)} (mΩ)	Leaded type				Surface Mounted type	
		 TO-247 (TO-247N)	 TO-247-4L <C15>	 TO-3PFM	 TO-263-7L		
650	17	SCT3017AL SCT3017ALHR	10 11				
	22	SCT3022AL SCT3022ALHR	12 13				
	30	SCT3030AL SCT3030ALHR	14 15	New SCT3030AR New SCT3030ARHR	32 33	SCT3030AW7	44
	60	SCT3060AL SCT3060ALHR	16 17	New SCT3060AR New SCT3060ARHR	34 35	SCT3060AW7	45
	80	SCT3080AL SCT3080ALHR	18 19	New SCT3080AR New SCT3080ARHR	36 37	SCT3080AW7	46
	120	SCT3120AL	20			SCT3120AW7	47
750	13	New SCT4013DE	52	New SCT4013DR	58	New SCT4013DW7	64
	26	New SCT4026DE New SCT4026DEHR	53 70	New SCT4026DR New SCT4026DRHR	59 74	New SCT4026DW7 New SCT4026DW7HR	65 78
	45	New SCT4045DE New SCT4045DEHR	54 71	New SCT4045DR New SCT4045DRHR	60 75	New SCT4045DW7 New SCT4045DW7HR	66 79
1,200	18	New SCT4018KE	55	New SCT4018KR	61	New SCT4018KW7	67
	22	SCT3022KL SCT3022KLHR	21 22				
	30	SCT3030KL SCT3030KLHR	23 24				
	36	New SCT4036KE New SCT4036KEHR	56 72	New SCT4036KR New SCT4036KRHR	62 76	New SCT4036KW7	68
	40	SCT3040KL SCT3040KLHR	25 26	SCT3040KR New SCT3040KRHR	38 39	SCT3040KW7	48
	62	New SCT4062KE New SCT4062KEHR	57 73	New SCT4062KR New SCT4062KRHR	63 77	New SCT4062KW7 New SCT4062KW7HR	69 80
	80	SCT2080KE SCT2080KEHR SCT3080KL SCT3080KLHR	1 2 27 28	SCT3080KR New SCT3080KRHR	40 41	SCT3080KW7	49
	105	SCT3105KL SCT3105KLHR	29 30	SCT3015KR New SCT3015KRHR	42 43	SCT3105KW7	50
	160	SCT2160KE SCT2160KEHR SCT3160KL	3 4 31			SCT3160KW7	51
	280	SCT2280KE SCT2280KEHR	5 6				
450	SCT2450KE SCT2450KEHR	7 8					
1,700	1,150				SCT2H12NZ	9	
	750						

注：封装按照JEDEC标准进行标识。()内表示ROHM封装，< >表示包装代码。

SiC MOSFET

第2代(平面型)												
No.	Part No.	Polarity (ch)	V _{DSS} (V)	I _D (A)	P _D (W) (T _C =25°C)	R _{DS(on)} Typ (mΩ)	Qg Typ (nC)		Package	Automotive Grade AEC-Q101		
						V _{GS} =18V	V _{GS} =18V	Drive Voltage (V)				
1	SCT2080KE	N	1,200	40	262	80	106	18	TO-247 (TO-247N)	—		
2	SCT2080KEHR	N		40	262	80	106	18		YES		
3	SCT2160KE	N		22	165	160	62	18		—		
4	SCT2160KEHR	N		22	165	160	62	18		YES		
5	SCT2280KE	N		14	108	280	36	18		—		
6	SCT2280KEHR	N		14	108	280	36	18		YES		
7	SCT2450KE	N		10	85	450	27	18		—		
8	SCT2450KEHR	N		10	85	450	27	18		YES		
9	SCT2H12NZ	N	1,700	3.7	35	1,150	14	18	TO-3PFM	—		
第3代(沟槽型)												
10	SCT3017AL	N	650	118	427	17	172	18	TO-247 (TO-247N)	—		
11	SCT3017ALHR	N		118	427	17	172	18		YES		
12	SCT3022AL	N		93	339	22	133	18		—		
13	SCT3022ALHR	N		93	339	22	133	18		YES		
14	SCT3030AL	N		70	262	30	104	18		—		
15	SCT3030ALHR	N		70	262	30	104	18		YES		
16	SCT3060AL	N		39	165	60	58	18		—		
17	SCT3060ALHR	N		39	165	60	58	18		YES		
18	SCT3080AL	N		30	134	80	48	18		—		
19	SCT3080ALHR	N		30	134	80	48	18		YES		
20	SCT3120AL	N		21	103	120	38	18		—		
21	SCT3022KL	N		1,200	95	427	22	178		18	TO-247-4L <C15>	—
22	SCT3022KLHR	N			95	427	22	178		18		YES
23	SCT3030KL	N			72	339	30	131		18		—
24	SCT3030KLHR	N			72	339	30	131		18		YES
25	SCT3040KL	N			55	262	40	107		18		—
26	SCT3040KLHR	N			55	262	40	107		18		YES
27	SCT3080KL	N			31	165	80	60		18		—
28	SCT3080KLHR	N			31	165	80	60		18		YES
29	SCT3105KL	N			24	134	105	51		18		—
30	SCT3105KLHR	N	24		134	105	51	18	YES			
31	SCT3160KL	N	17	103	160	42	18	—				
32	SCT3030AR	N	650	70	262	30	104	18	TO-247-4L <C15>	—		
33	New SCT3030ARHR	N		70	262	30	104	18		YES		
34	SCT3060AR	N		39	165	60	58	18		—		
35	New SCT3060ARHR	N		39	165	60	58	18		YES		
36	SCT3080AR	N		30	134	80	48	18		—		
37	New SCT3080ARHR	N		30	134	80	48	18		YES		
38	SCT3040KR	N	1,200	55	262	40	107	18	TO-263-7L	—		
39	New SCT3040KRHR	N		55	262	40	107	18		YES		
40	SCT3080KR	N		31	165	80	60	18		—		
41	New SCT3080KRHR	N		31	165	80	60	18		YES		
42	SCT3105KR	N		24	134	105	51	18		—		
43	New SCT3105KRHR	N	24	134	105	51	18	YES				
44	SCT3030AW7	N	650	70	267	30	104	18	TO-263-7L	—		
45	SCT3060AW7	N		38	159	60	58	18		—		
46	SCT3080AW7	N		29	125	80	48	18		—		
47	SCT3120AW7	N		21	100	120	38	18		—		
48	SCT3040KW7	N	1,200	56	267	40	107	18	TO-263-7L	—		
49	SCT3080KW7	N		30	159	80	60	18		—		
50	SCT3105KW7	N		23	125	105	51	18		—		
51	SCT3160KW7	N		17	100	160	42	18		—		

注：封装按照JEDEC标准进行标识。()内表示ROHM封装，< >表示包装代码。

第4代(沟槽型)										
No.	Part No.	Polarity (ch)	V _{DSS} (V)	I _D (A)	P _D (W) (T _C =25°C)	R _{DS(on)} Typ (mΩ)	Qg Typ (nC)		Package	Automotive Grade AEC-Q101
						V _{GS} =18V	V _{GS} =18V	Drive Voltage (V)		
52	New SCT4013DE	N	750	105	312	13	170	15 to 18	TO-247 (TO-247N)	—
53	New SCT4026DE	N		56	176	26	94	15 to 18		—
54	New SCT4045DE	N		34	115	45	63	15 to 18		—
55	New SCT4018KE	N	1,200	81	312	18	170	15 to 18		—
56	New SCT4036KE	N		43	176	36	91	15 to 18		—
57	New SCT4062KE	N		26	115	62	64	15 to 18		—
58	New SCT4013DR	N	750	105	312	13	170	15 to 18	TO-247-4L <C15>	—
59	New SCT4026DR	N		56	176	26	94	15 to 18		—
60	New SCT4045DR	N		34	115	45	63	15 to 18		—
61	New SCT4018KR	N	1,200	81	312	18	170	15 to 18		—
62	New SCT4036KR	N		43	176	36	91	15 to 18		—
63	New SCT4062KR	N		26	115	62	64	15 to 18		—
64	New SCT4013DW7	N	750	98	267	13	170	15 to 18	TO-263-7L	—
65	New SCT4026DW7	N		51	150	26	94	15 to 18		—
66	New SCT4045DW7	N		31	93	45	63	15 to 18		—
67	New SCT4018KW7	N	1,200	75	267	18	170	15 to 18		—
68	New SCT4036KW7	N		40	150	36	91	15 to 18		—
69	New SCT4062KW7	N		24	93	62	64	15 to 18		—
70	New SCT4026DEHR	N	750	56	176	26	94	15 to 18	TO-247 (TO-247N)	YES
71	New SCT4045DEHR	N		34	115	45	63	15 to 18		YES
72	New SCT4036KEHR	N		1,200	43	176	36	91		15 to 18
73	New SCT4062KEHR	N	26		115	62	64	15 to 18	YES	
74	New SCT4026DRHR	N	750	56	176	26	94	15 to 18	TO-247-4L <C15>	YES
75	New SCT4045DRHR	N		34	115	45	63	15 to 18		YES
76	New SCT4036KRHR	N		1,200	43	176	36	91		15 to 18
77	New SCT4062KRHR	N	26		115	62	64	15 to 18		YES
78	New SCT4026DW7HR	N	750		51	150	26	94		15 to 18
79	New SCT4045DW7HR	N		31	93	45	63	15 to 18		YES
80	New SCT4062KW7HR	N	1,200	24	93	62	64	15 to 18	YES	

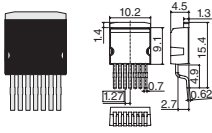
注：封装按照JEDEC标准进行标识。()内表示ROHM封装，< >表示包装代码。

SiC MOSFET

●尺寸 (单位: mm)

表面贴装型

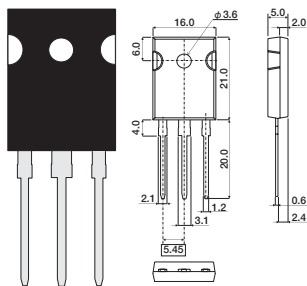
TO-263-7L



Each lead has same dimensions

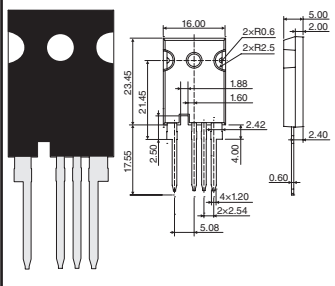
引脚插入型

TO-247 (TO-247N)



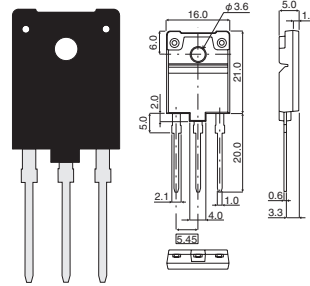
Each lead has same dimensions

TO-247-4L <C15>



Each lead has same dimensions

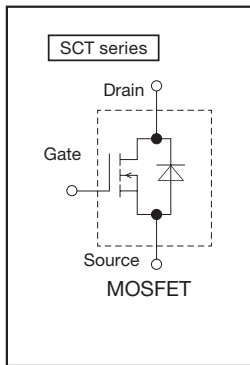
TO-3PFM



Each lead has same dimensions

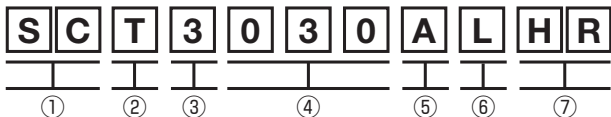
注: 封装按照JEDEC标准进行标识。()内表示ROHM封装, < >表示包装代码。

●内部电路图



●品名构成说明

●关于MOSFET的品名(基本型号)



- | | | |
|---------------------|----------|-------------------------|
| ① SiC分立元器件 | ⑤ 电压 | A → 650V |
| ② T → MOSFET | | D → 750V |
| ③ 世代 | | K → 1,200V |
| ④ ON-resistance[mΩ] | | N → 1,700V |
| 080=80mΩ | ⑥ 封装 | E, L → TO-247 (TO-247N) |
| H12=1.2Ω | | Z → TO-3PFM |
| | | R → TO-247-4L |
| | | W7 → TO-263-7L |
| | ⑦ 表示支持车载 | |

●封装类型

Package	Code	Packaging Style	Basic Ordering Unit (pcs)
TO-263-7L	TL	Embossed Tape	1,000
TO-247 (TO-247N)	C11	Tube	30
TO-247-4L	C15	Tube	30
TO-3PFM	C11	Tube	30

注: 封装按照JEDEC标准进行标识。()内表示ROHM封装。