



SJH20300

主要参数 MAIN CHARACTERISTICS

$I_{F(AV)}$	20 (2×10) A
V_{RRM}	300 V
T_j	150 °C
$V_{F(max)}$	0.85V (@ $T_j=125^{\circ}C$)

用途

- 高频开关电源
- 低压续流电路和保护电路

产品特性

- 共阴结构
- 低功耗，高效率
- 良好的高温特性
- 高可靠性
- 环保 (RoHS) 产品

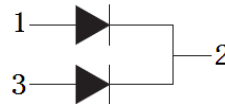
APPLICATIONS

- High frequency switch power supply
- Free wheeling diodes, polarity protection applications

FEATURES

- Common cathode structure
- Low power loss, high efficiency
- High Operating Junction Temperature
- High reliability
- RoHS product

封装 Package



TO-220



TO-220C



TO-263



TO-220MF-K1



订货信息 ORDER MESSAGE

订 货 型 号 Order codes				印 记 Marking	封 装 Package
有卤-条管 Halogen-Tube	无卤-条管 Halogen Free-Tube	有卤-编带 Halogen-Reel	无卤-编带 Halogen Free-Reel		
N/A	SJH20300-CA-BR	N/A	N/A	SJH20300	TO-220
N/A	SJH20300-C-BR	N/A	N/A	SJH20300	TO-220C
N/A	SJH20300-F1-BR	N/A	N/A	SJH20300	TO-220MF-K1
N/A	SJH20300-S-BR	N/A	SJH20300-S-AR	SJH20300	TO-263





绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

项 目 Parameter			符 号 Symbol	数 值 Value	单 位 Unit
最大反向重复峰值电压 Repetitive peak reverse voltage			V_{RRM}	300	V
最大直流阻断电压 Maximum DC blocking voltage			V_{DC}	300	V
正向平均整流电流 Average forward current	$T_C=122^{\circ}\text{C}$ (TO-220/220C/263)	整个器件 per device	$I_{F(AV)}$	20	A
	$T_C=100^{\circ}\text{C}$ (TO-220MF-1)	单 侧 per diode		10	
正向峰值浪涌电流 Surge non repetitive forward current (额定负载 8.3ms 半正弦波—按 JEDEC 方法) 8.3 ms single half-sine-wave (JEDEC Method)			I_{FSM}	180	A
最高结温 Maximum junction temperature			T_j	150	℃
储存温度 Storage temperature range			T_{STG}	-40~+150	℃

电特性 ELECTRICAL CHARACTERISTICS

项 目 Parameter	测试条件 Tests conditions		最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单位 Unit
I_R	$T_j=25^{\circ}\text{C}$	$V_R=V_{RRM}$			50	μA
	$T_j=125^{\circ}\text{C}$				10	mA
V_F	$T_j=25^{\circ}\text{C}$	$I_F=10\text{A}$		0.86	0.98	V
	$T_j=125^{\circ}\text{C}$			0.735	0.85	V

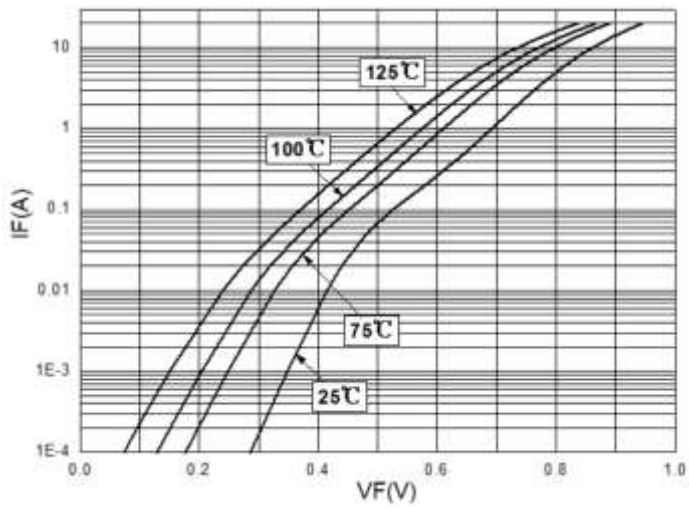
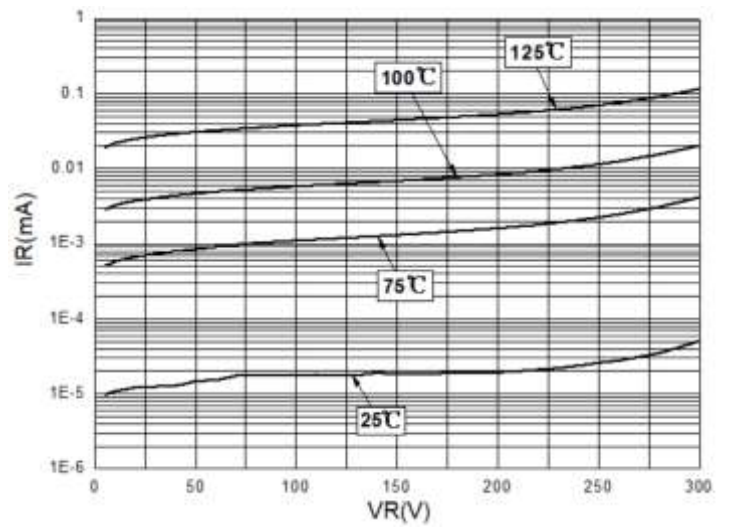
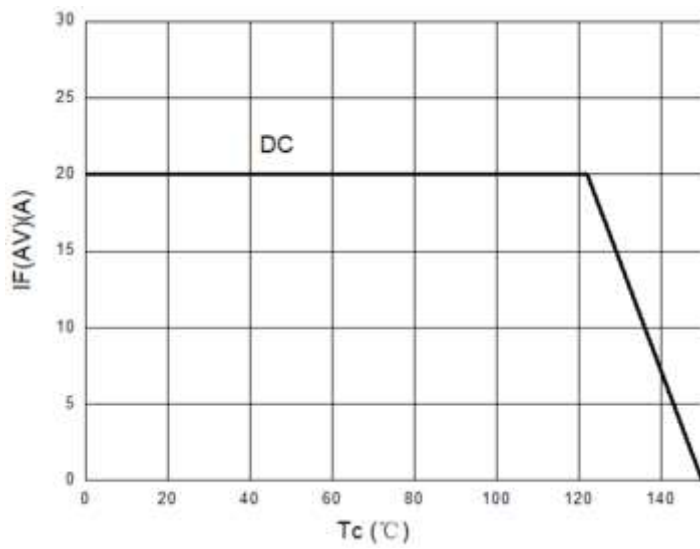
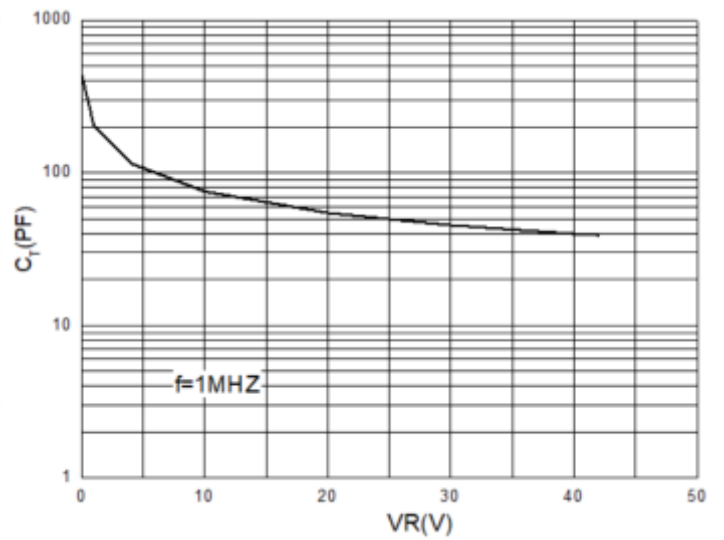
热特性 THERMAL CHARACTERISTICS

项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	$R_{th(j-c)}$		1.9 1.9 2.2 3.5	℃/W
	TO-220 TO-220C 263 TO-220MF-K1			





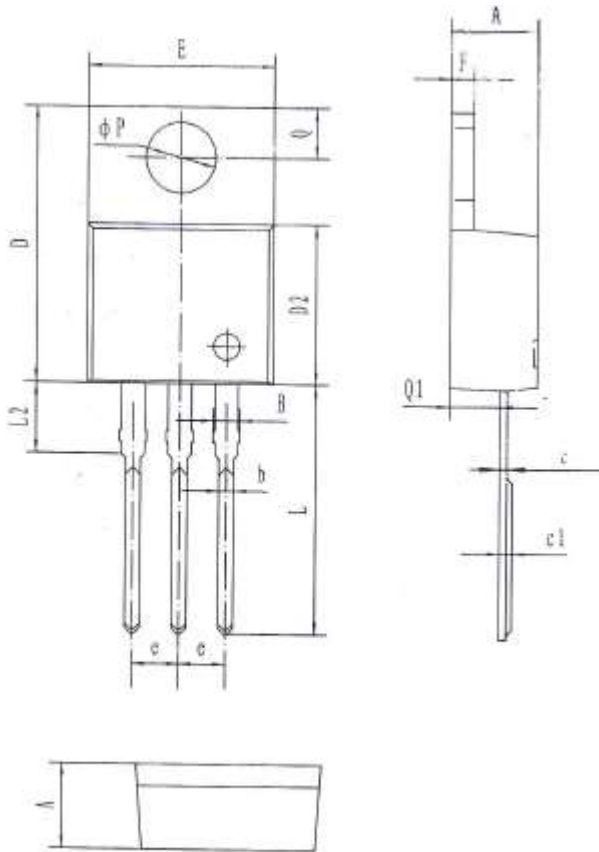
特征曲线 ELECTRICAL CHARACTERISTICS (curves)

 I_F vs V_F  I_R vs V_R  $I_F(AV)$ vs T_c  C_T vs V_R 



外形尺寸PACKAGE MECHANICAL DATA
TO-220

单位 Unit : mm



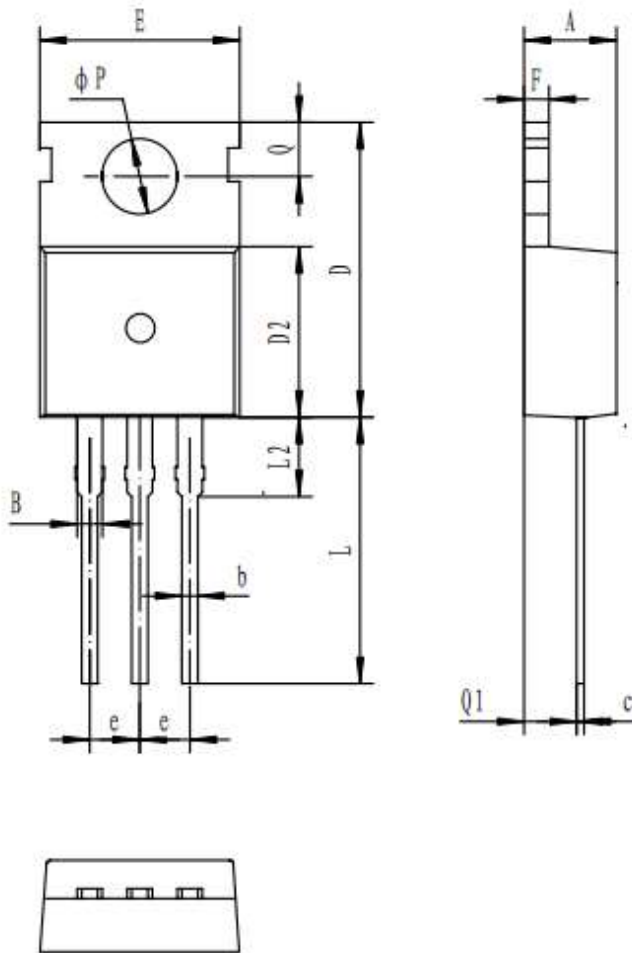
符号 symbol	MIN	MAX
A	4.40	4.80
B	1.10	1.40
b	0.70	0.95
c	0.28	0.48
c1	0.32	0.52
D	14.45	16.00
D2	8.20	9.20
E	9.60	10.40
e	2.39	2.69
F	1.20	1.35
L	13.05	14.05
L2	3.70	3.90
Q	2.40	3.00
Q1	2.20	2.90
P	3.50	4.00



SJH20300

外形尺寸 PACKAGE MECHANICAL DATA
TO-220C

单位 Unit : mm

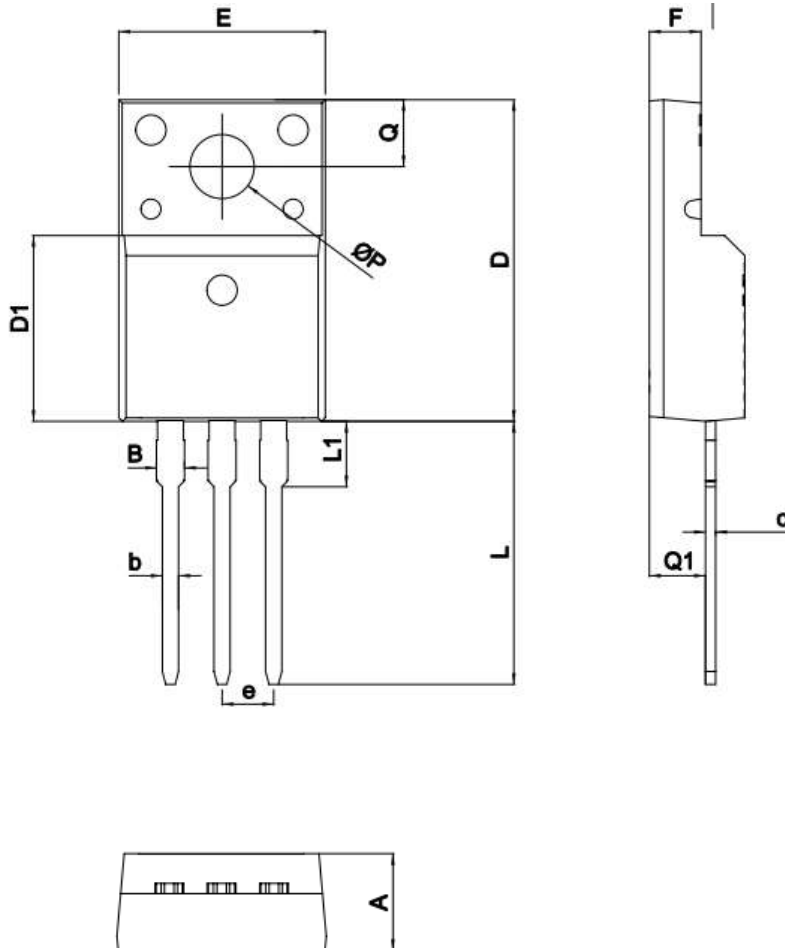


符号 symbol	MIN	MAX
A	4.30	4.70
B	1.10	1.40
b	0.70	0.95
c	0.40	0.65
D	15.20	16.20
D2	9.00	9.40
E	9.70	10.10
e	2.39	2.69
F	1.25	1.40
L	12.60	13.60
L2	2.80	3.20
Q	2.60	3.00
Q1	2.20	2.60
P	3.50	3.80



外形尺寸 PACKAGE MECHANICAL DATA
TO-220MF-K1

单位 Unit : mm



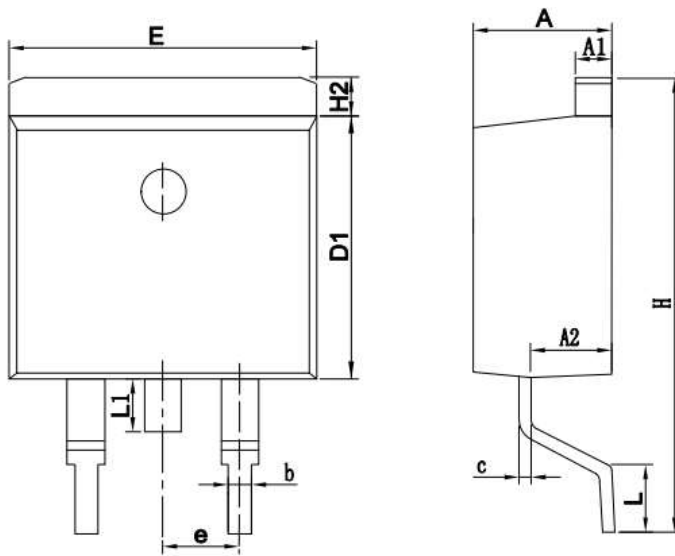
SYMBOL	mm	
	MIN	MAX
A	4.5	4.9
B	1.22	1.47
b	0.7	0.9
c	0.45	0.60
D	15.6	16.1
D1	9.0	9.3
e	2.54TYPE	
E	9.9	10.4
F	2.3	2.8
L	12.6	13.3
L1	3.1	3.4
Q	3.2	3.4
Q1	2.6	2.9
ΦP	3.0	3.5



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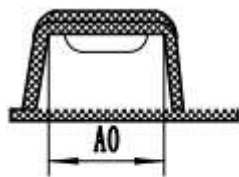
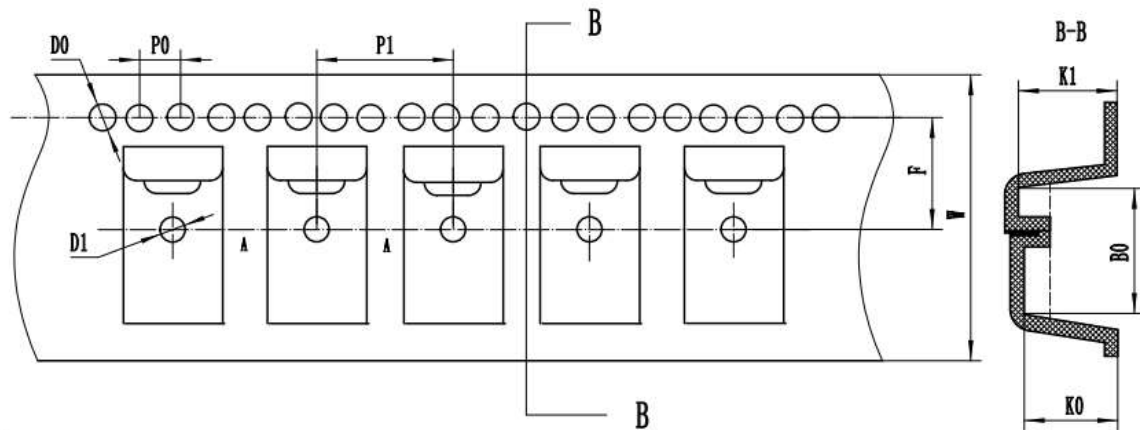
外形尺寸 PACKAGE MECHANICAL DATA
TO-263

单位 Unit : mm



SYMBOL	MM	
	MIN	MAX
A	4.30	4.80
A1	1.12	1.42
A2	2.54	2.84
b	0.67	1.00
c	0.29	0.52
D1	8.40	9.00
E	9.80	10.46
e	2.54BSC	
H	14.00	16.00
H2	1.12	1.45
L	1.50	3.10
L1	1.45	1.70

编带 REEL



A-A

Symbol	标准范围 (mm)
A0	10.60±0.20
B0	16.10±0.20
D0	1.55±0.10
D1	1.50±0.15
F	11.50±0.20
K0	4.85±0.20
K1	5.26±0.20
P0	4.00±0.20
P1	16.00±0.20
W	24.00±0.40



注意事项

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3. 在电路设计时请不要超过器件的绝对最大额定值，否则会影响整机的可靠性。
4. 本说明书如有版本变更不另外告知。

NOTE

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2. We strongly recommend customers check carefully on the trademark when buying our product, if there is any question, please don't be hesitate to contact us.
3. Please do not exceed the absolute maximum ratings of the device when circuit designing.
4. Jilin Sino-microelectronics co., Ltd reserves the right to make changes in this. specification sheet and is subject to change without prior notice.

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