



# 16F20C3/16F20HF3

## 主要参数 MAIN CHARACTERISTICS

$I_{F(AV)}$	8x2 A
$V_R$	200 V
$T_j(max)$	150°C
$V_F(typ)$	0.93V
$T_{RR} (typ)$	20ns

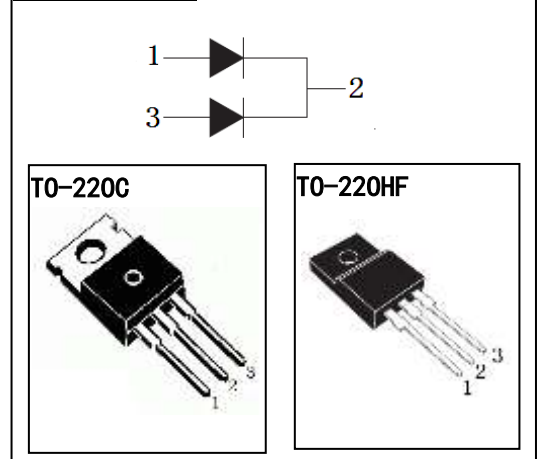
### 用途

- 开关电源
- 通用电路

### APPLICATIONS

- Switch power supply
- General circuits

### 封装 Package



### 产品特性

- 共阴结构
- 低功耗, 高效率
- 高可靠性
- 环保 (RoHS) 产品

### FEATURES

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

## 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		
16F20C3-C-B	16F20C3-C-BR	N/A	N/A	16F20C3	TO-220C
16F20HF3-FA-B	16F20HF3-FA-BR	N/A	N/A	16F20HF3	TO-220HF

**绝对最大额定值 ABSOLUTE RATINGS (Tc=25°C)**

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 <sub>RRM</sub>	200	V
正向平均整流电流 Average forward current	I <sub>F(AV)</sub>	T <sub>C</sub> =100°C (TO-220C) 整个器件 per device 16	A
		T <sub>C</sub> =100°C (TO-220HF) 单 侧 per diode 8	
峰值单脉冲浪涌电流 Peak one Cycle Surge Forward Current(Non-Repetitive) t=10ms	I <sub>FSM</sub>	80	A
结温 Junction Temperature	T <sub>J</sub>	-50~+150	°C
储存温度 Storage temperature range	T <sub>STG</sub>	-50~+150	°C

**电特性 ELECTRICAL CHARACTERISTICS (Tc=25°C unless otherwise specified)**

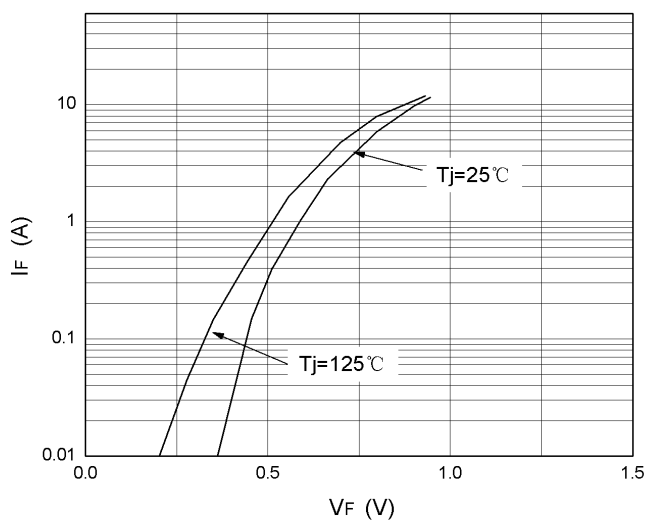
项 目 Parameter	测试条件 Tests conditions	最小值 Value(min)	典型值 Value(typ)	最大值 Value(max)	单位 Unit
V <sub>RRM</sub>	I <sub>R</sub> =50μA	200			V
I <sub>R</sub>	T <sub>J</sub> =25°C			50	μA
	T <sub>J</sub> =125°C			200	μA
V <sub>F</sub>	T <sub>J</sub> =25°C		0.93	1.1	V
	T <sub>J</sub> =125°C			1.0	V
T <sub>RR</sub>	I <sub>F</sub> =1A, V <sub>R</sub> =30V, di <sub>F</sub> /dt=-200A/μs		20	29	ns

**热特性 THERMAL CHARACTERISTICS**

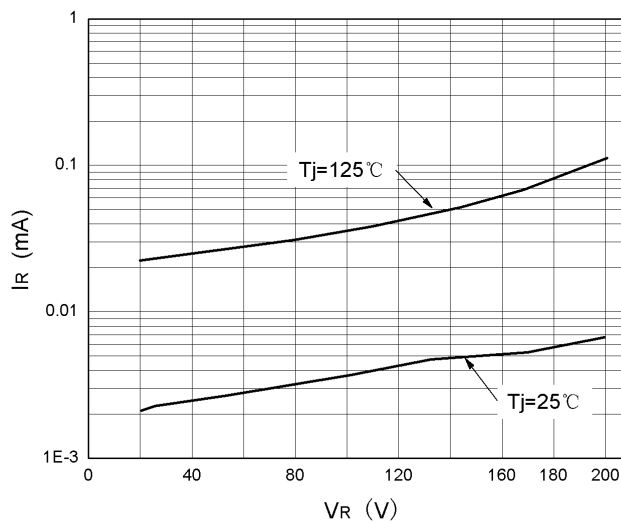
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	R <sub>th(j-c)</sub>		1.9	°C/W
			4.5	



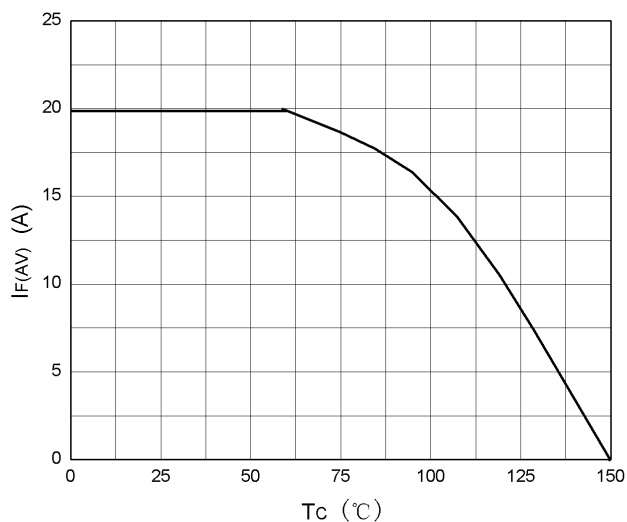
IF vs VF



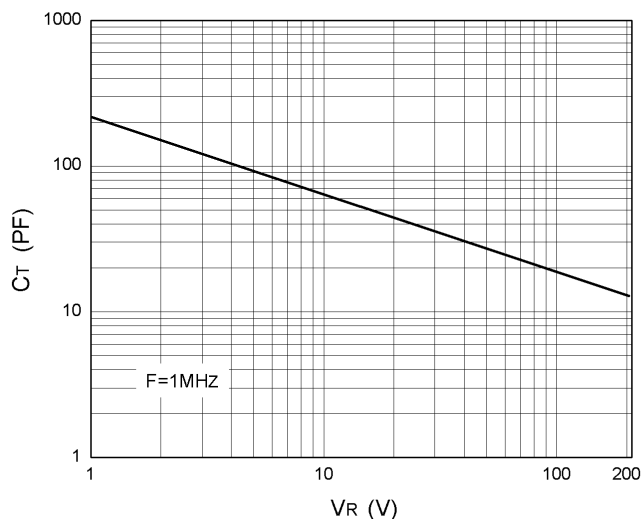
IR vs VR

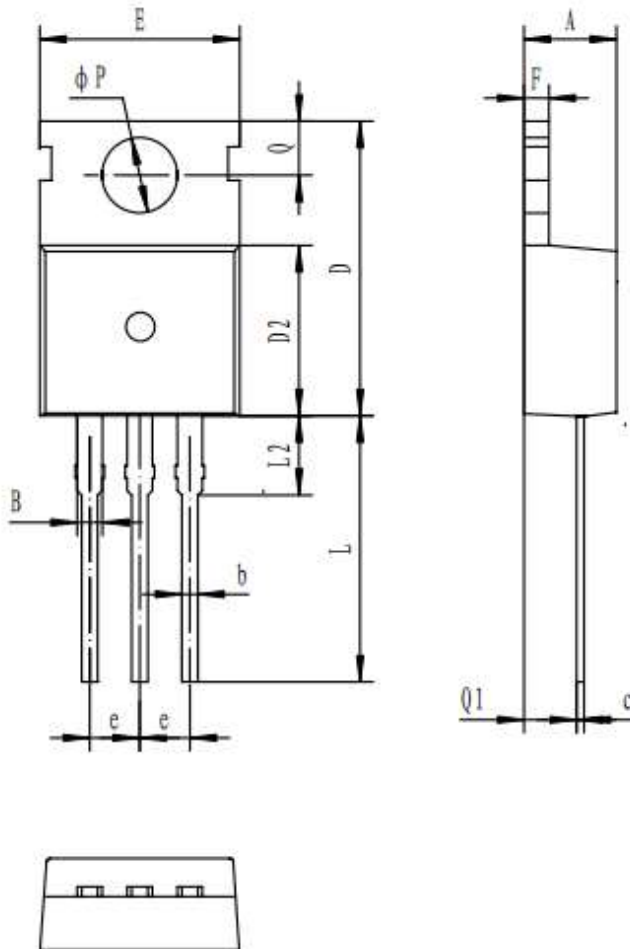


IF(AV) vs Tc

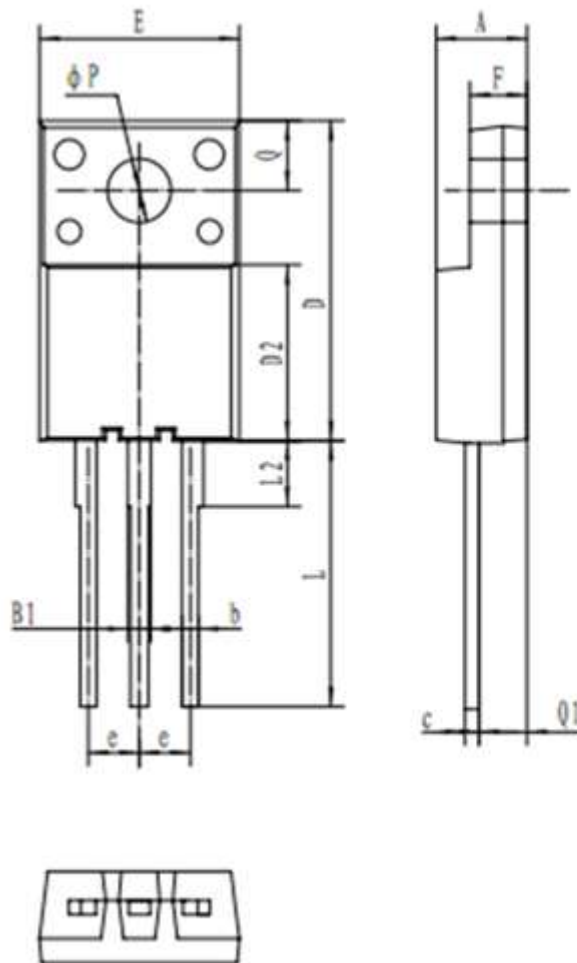


CT vs VR





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
Q1	2.20	2.60
P	3.50	3.80



符号 symbol	MIN	MAX
A	4.0	5.0
B1	0.87	1.27
b	0.72	0.92
c	0.5	0.7
D	15.0	16.5
D2	7.8	9.4
E	9.62	10.62
e	2.54 TYP	
F	2.3	3.3
L	13.0	14.0
L2	3.1	3.5
$\phi p$	3.0	3.4
Q	3.15	3.55
Q1	2.2	2.5



**注意事项**

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- 2.购买时请认清公司商标，如有疑问请与公司本部联系。
- 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

**NOTES**

1. Jilin Sino-microelectronics co.Ltd sales its product either through direct sales or sales agent , thus, for customers, when ordering , please check with our company.
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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