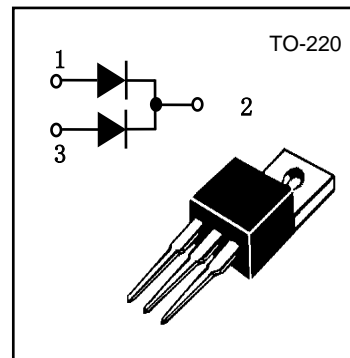


### APPLICATIONS

- High efficiency switch mode power supplies
- Free wheeling diodes.polarity protection application

### FEATURES

- Common cathode structure
- Low power loss,high efficiency
- High Operating Junction Temperature.
- Guard ring for overvoltage protection,High reliability
- ROHS product



### 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>	80	V
最大直流阻断电压 Maximum DC blocking voltage	V <sub>DC</sub>	80	V
正向平均整流电流 @ T <sub>C</sub> =150°C Average forward current @ T <sub>C</sub> =150°C	I <sub>F(AV)</sub>	20	A
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 <sub>FSM</sub>	200	A
最高结温 Maximum junction temperature	T <sub>J</sub>	175	°C
储存温度 Storage temperature range	T <sub>STG</sub>	-55~+150	°C

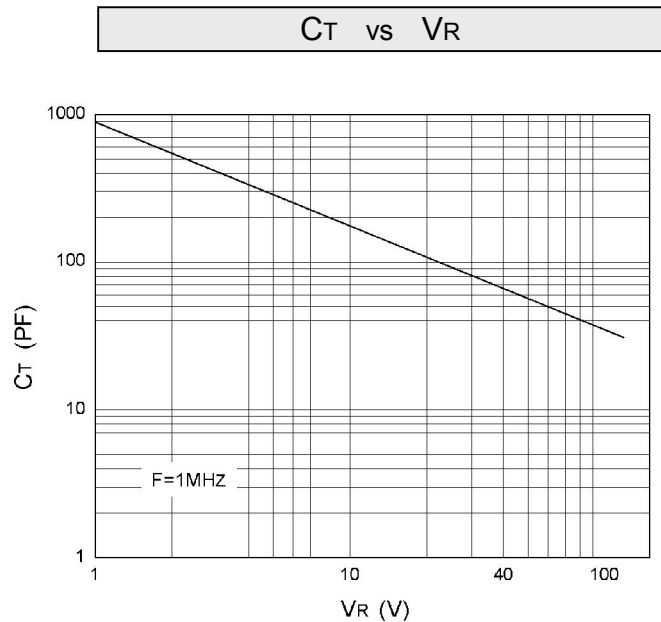
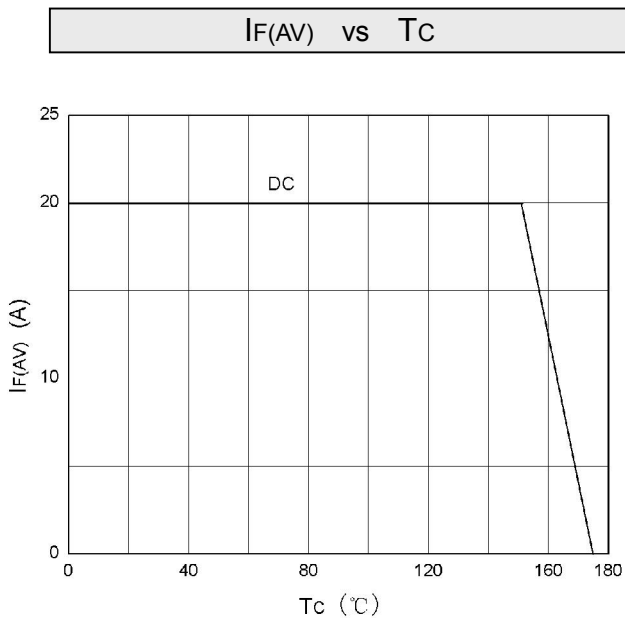
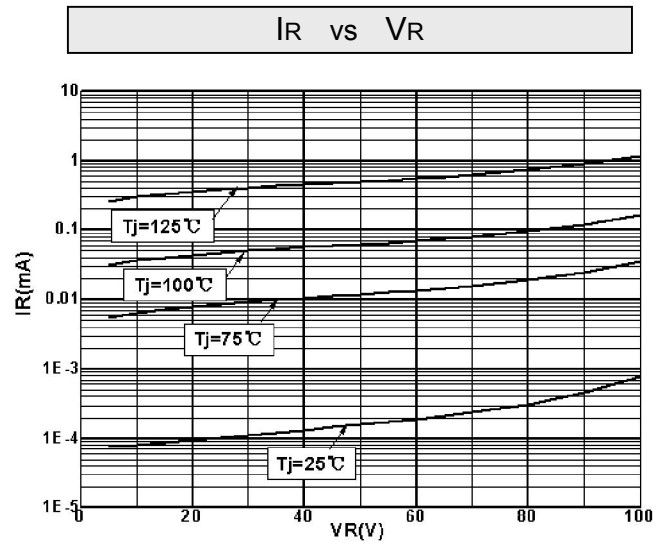
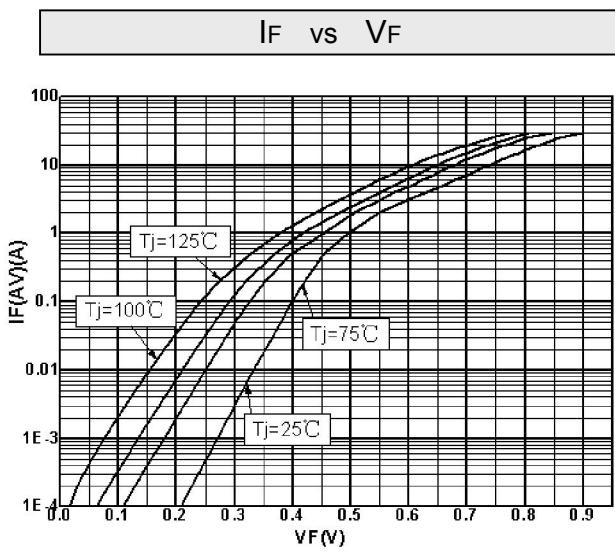
### 电特性Electronic Characteristics(Tc=25°C)

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 <sub>R</sub>	T <sub>J</sub> =25°C	V <sub>R</sub> =V <sub>RRM</sub>			10	μA
	T <sub>J</sub> =125°C				5	mA
V <sub>F</sub>	T <sub>J</sub> =25°C	I <sub>F</sub> =0.1 A			0.35	V
	T <sub>J</sub> =25°C	I <sub>F</sub> = 10 A			0.77	V
	T <sub>J</sub> =125°C			0.60	0.67	V
	T <sub>J</sub> =25°C	I <sub>F</sub> =20A			0.83	V
T <sub>J</sub> =125°C			0.7	0.78	V	

## 热特性 THERMAL CHARACTERISTICS

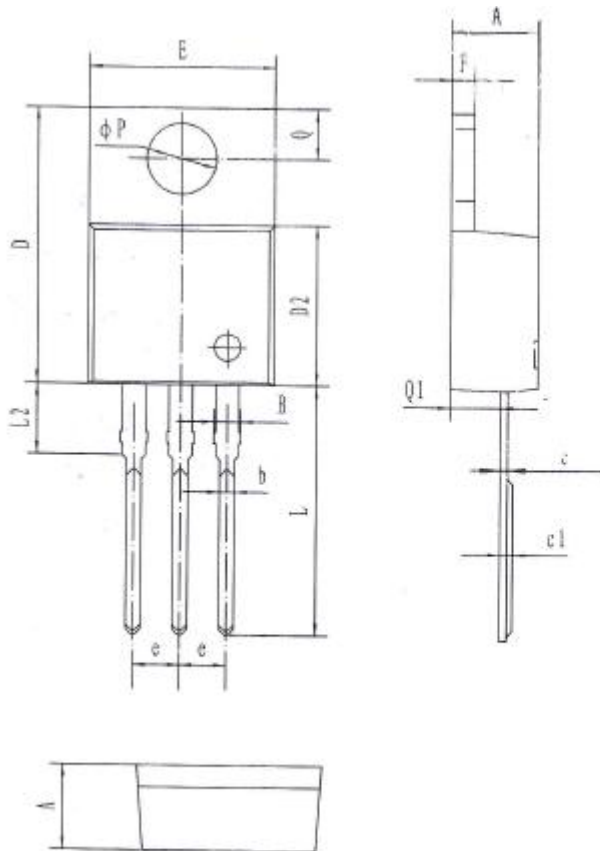
项 目 Parameter	符 号 Symbol	最小值 Value(min)	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	TO-220 TO-220F $R_{th(j-c)}$		1.9 2.5	$^{\circ}C/W$

## 特性曲线 ELECTRICAL CHARACTERISTICS (curves)



## 外形尺寸 PACKAGE MECHANICAL DATA

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