

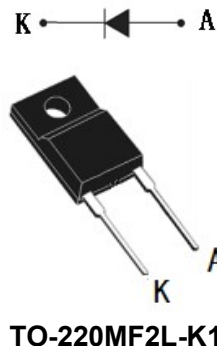


FP20K60AA

主要参数 MAIN CHARACTERISTICS

$I_F(AV)$	20A
V_{RRM}	600 V
$V_F(typ)$	2.7V
$t_{rr} (typ)$	20ns

封装 Package



用途

- 有源功率校正电路
- 开关电源
- UPS
- 高频开关器件并联二极管

APPLICATIONS

- Active power factor correction
- Switch power supply
- UPS
- Antiparalle Diode for high frequency switching devices

产品特性

- 低功耗，高效率
- 超快恢复时间
- 高可靠性
- 环保（RoHS）产品

FEATURES

- Ultrafast Recovery Time
- High surge current capability
- 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		
FP20K60AA-FK-B	FP20K60AA-FK-BR	FP20K60AA	TO-220MF2L-K1

**绝对最大额定值 ABSOLUTE RATINGS** ($T_c=25^{\circ}\text{C}$)

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_{RRM}	600	V
正向平均整流电流 Average forward Current $T_c=100^{\circ}\text{C}$	$I_{F(AV)}$	20	A
峰值单脉冲浪涌电流 Peak one Cycle Surge Forward Current(Non-Repetitive) $t=8.3\text{ms}$	I_{FSM}	180	A
结温 Junction Temperature	T_j	$-55\sim+150$	$^{\circ}\text{C}$
储存温度 Storage temperature range	T_{STG}	$-55\sim+150$	$^{\circ}\text{C}$

电特性 ELECTRICAL CHARACTERISTICS ($T_c=25^{\circ}\text{C}$ 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 _{RRM}	I _R =50μA		600	700		V
I _R	T _j =25℃	V _R =V _{RRM}			10	μA
	T _j =125℃				400	μA
V _F	T _j =25℃	I _F =20A		2.7	3.2	V
	T _j =125℃				2.5	V
T _{rr}	I _F =0.5A,I _R =1A,I _{RR} =0.25A			20	28	ns
t _{rr}	I _F =20A, V _R =400V, di _F /dt=-1000A/μs T _C =25℃			20		ns
Q _{rr}				108		nc
I _{RRM}				4.6		A
t _{rr}	I _F =20A, V _R =400V, di _F /dt=-1000A/μs T _C =125℃			43		ns
Q _{rr}				340		nc
I _{RRM}				7.9		A
CT	V _R = 100V F=1Mhz			35		pF

热特性 THERMAL CHARACTERISTICS

项 目 Parameter	符 号 Symbol	最大值 Value(max)	单 位 Unit
结到管壳的热阻 Thermal resistance from junction to case	$R_{th(j-c)}$	3.8	$^{\circ}\text{C}/\text{W}$





特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 TYPICAL FORWARD CHARACTERISTICS

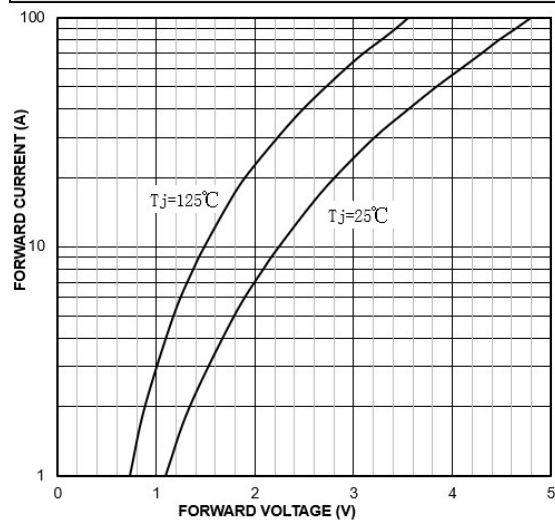


Fig.2 TYPICAL REVERSE CHARACTERISTICS

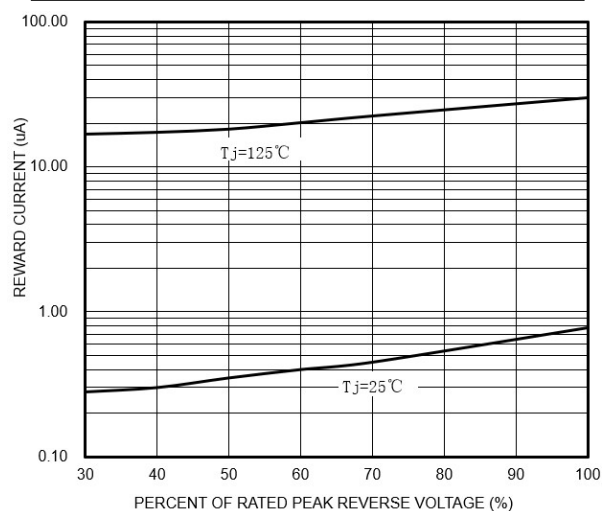


Fig.3 TYPICAL JUNCTION CAPACITANCE

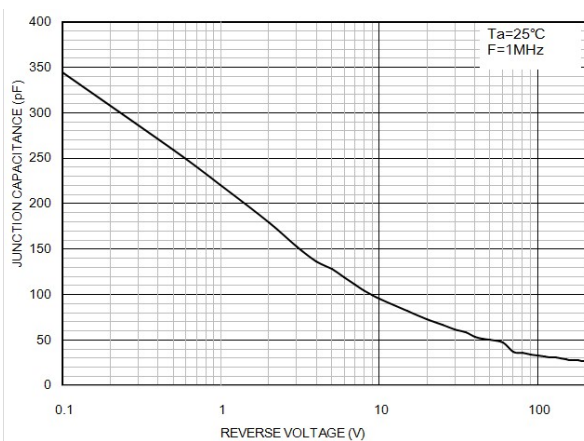
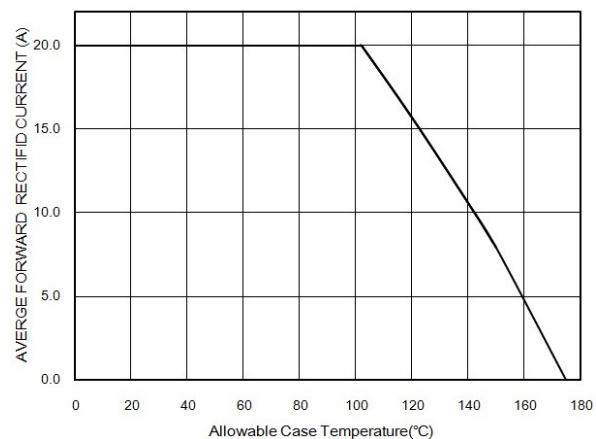


Fig.4 Maximum Allowable Case Temperature vs Average Forward Current

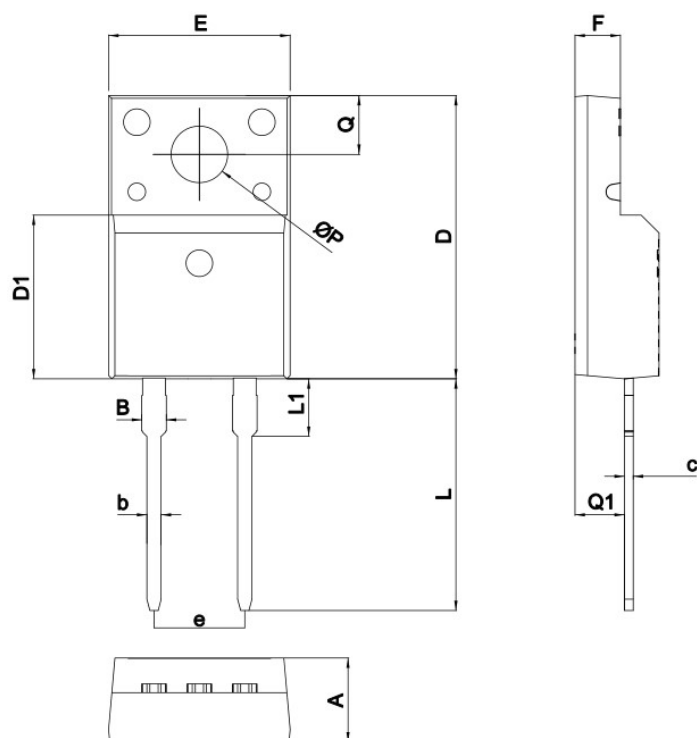




外形尺寸 PACKAGE MECHANICAL DATA

TO-220MF2L-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	5.08TYPE	
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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