

F60U20P

主要参数 MAIN CHARACTERISTICS

$I_F(AV)$	30*2 A
V_{RRM}	200 V
T_j	175 °C
$V_F(typ)$	0.98V
$T_{rr} (typ)$	24ns

用途

- 开关电源
- 续流电路

APPLICATIONS

- switch power supply
- Free wheeling diodes,

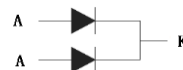
产品特性

- 低功耗，高效率
- 良好的高温特性
- 环保（RoHS）产品

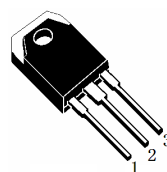
FEATURES

- Low power loss, high efficiency
- High Operating Junction Temperature
- RoHS product

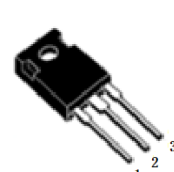
封装 Package



TO-3P



TO-247-3L



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}	200	V
最大直流阻断电压 Maximum DC blocking voltage		V_{DC}	200	V
正向平均整流电流 (TC=110℃) Average forward current	整个器件 per device	$I_{F(AV)}$	60	A
	单 侧 per diode		30	
正向峰值单脉冲浪涌电流 Single pulse forward current		I_{FSM}	360	A
最高结温 Maximum junction temperature		T_j	175	℃
储存温度 Storage temperature range		T_{STG}	-40~+175	℃

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
V _R	I _R =100μA		200	-	-	V
I _R	T _j =25℃	V _R =V _R RM	-	-	10	μA
	T _j =150℃		-	-	100	μA
V _F	T _j =25℃	I _F =30A	-	0.98	1.25	V
	T _j =125℃		-	0.88	1.15	V
T _{rr}	I _F =0.5A,I _R =1.0A,I _{RR} =0.25A		-	28	40	ns
T _{rr}	I _F =1A, V _R =30V, di _F /dt=-200A/μs		-	24	35	ns

特征曲线 ELECTRICAL CHARACTERISTICS (curves)

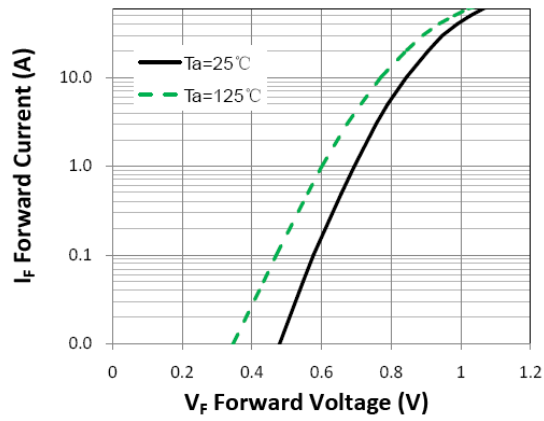


Figure 1. Forward Characteristic(typ.)

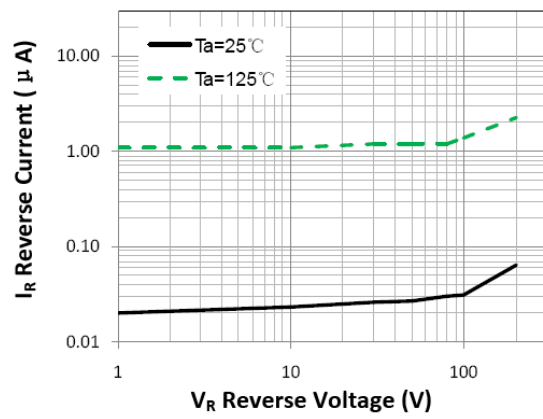
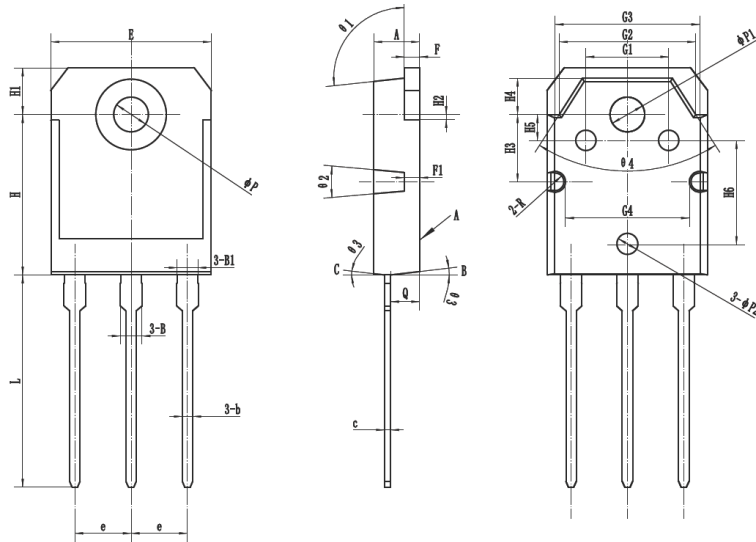


Figure 2. Reverse Characteristic (typ.)

外形尺寸 PACKAGE MECHANICAL DATA

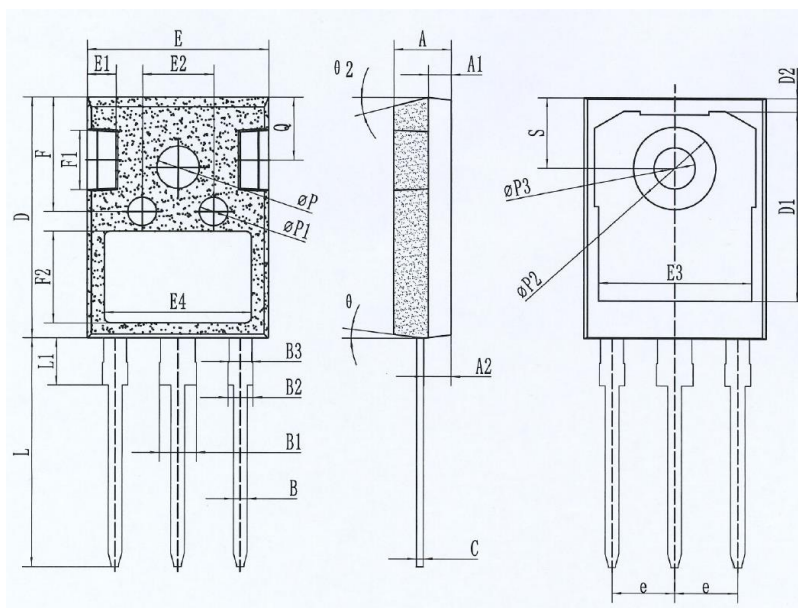
TO-3P



SYMBOL	mm		
	MIN	NOM	MAX
*A	4.45	4.55	4.65
*B	1.95	2.00	2.05
B1	2.00	2.10	2.20
*b	0.95	1.00	1.05
*c	0.59	0.60	0.61
*E	15.45	15.50	15.55
*e	5.40	5.45	5.50
*F	1.485	1.50	1.515
F1	1.45	1.50	1.55
G1	7.95	8.00	8.05
G2	13.10	13.20	13.30
G3	13.90	14.00	14.10
G4	11.95	12.00	12.05
*H	15.40	15.50	15.60
*H1	4.45	4.50	4.55
H2	0.45	0.50	0.55
H3	6.45	6.50	6.55
H4	3.45	3.50	3.55
H5	2.45	2.50	2.55
H6	9.95	10.00	10.05
*L	20.30	20.50	20.70
*φP	3.35	3.40	3.45
*φP1	3.15	3.20	3.25
φP2	1.95	2.00	2.05
*Q	2.75	2.80	2.85
R	0.95	1.00	1.05
θ1	94.5°	95°	95.5°
θ2	9.5°	10°	10.5°
θ3	4.5°	5°	5.5°

注：带*号为检验尺寸

TO-247-3L



COMMON DIMENSIONS

SYMBOL	MM		
	MIN	NOM	MAX
A	4.90	5.00	5.10
A1	1.90	2.00	2.10
A2	2.30	2.40	2.50
B	1.14	1.19	1.24
B1	3.05	3.15	3.25
B2	2.00	2.10	2.20
B3	1.90	2.00	2.10
C	0.55	0.60	0.65
D	20.80	21.00	21.20
D1	16.35	16.55	16.75
D2	1.02	1.17	1.32
E	15.60	15.80	16.00
E1	2.40	2.50	2.60
E2	6.10	6.20	6.30
E3	13.06	13.26	13.46
E4	12.70	12.80	12.90
F	9.80	10.00	10.20
F1	4.80	5.10	5.40
F2	7.90	8.00	8.10
e	5.436 BSC		
L	19.72	19.92	20.12
L1	3.90	4.10	4.30
φP	3.55	3.75	3.95
φP1	2.40	2.50	2.60
φP2	7.09	7.19	7.29
φP3	3.50	3.60	3.70
S	6.05	6.15	6.25
Q	5.40	5.50	5.60
θ	5°	7°	9°
θ1	5°	7°	9°
θ2	13°	15°	17°