

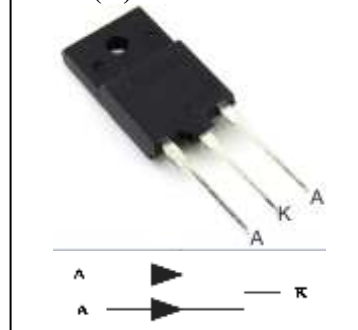


# 60F60A3

## 主要参数 MAIN CHARACTERISTICS

IF(AV)	30×2 A
VRRM	600 V
VF(typ)	1.9V
ttr (typ)	26ns

## 封装 Package TO-3P(H)IS



## 用途

- UPS
- 开关电源
- PFC
- 逆变焊机

## APPLICATIONS

- UPS
- Switch power supply
- PFC
- Inversion Welder

## 产品特性

- 低正向压降
- 低 IRM 和 Qrr
- 高可靠性
- 环保 (RoHS) 产品

## FEATURES

- Low Forward Voltage
- Low IRM and reverse recovery charge
- 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		
60F60A3-GA-B	60F60A3-GA-BR	60F60A3	TO-3P(H)IS

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
最大反向工作峰值电压 Working Peak Reverse Voltage	$V_{RWM}$	600	V
平均正向整流电流 $T_c=100^\circ\text{C}$ Average Forward Rectified Current	$I_{F(AV)}$	Per Package 60	A
		Per Diode 30	
非重复浪涌正向电流 Non-Repetitive Surge Forward Current $t=8.3\text{ms}$	$I_{FSM}$	250	A
雪崩能量 Avalanche Energy(per diode) $L=40\text{mH}$	$E_{AVL}$	20	mJ
结温 Junction Temperature	$T_j$	-50~+150	$^\circ\text{C}$
储存温度 Storage temperature range	$T_{STG}$	-50~+150	$^\circ\text{C}$

电特性 ELECTRICAL CHARACTERISTICS ( $T_c=25^\circ\text{C}$  unless otherwise specified) per diode

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
$V_R$	$I_R=50\mu\text{A}$		600	700	-	V
$I_R$	$T_j=25^\circ\text{C}$	$V_R=V_{RRM}$	-	-	20	$\mu\text{A}$
	$T_j=125^\circ\text{C}$		-	-	200	$\mu\text{A}$
$V_F$	$T_j=25^\circ\text{C}$	$I_F=30\text{A}$	-	1.9	2.5	V
	$T_j=125^\circ\text{C}$		-	-	2.1	V
$T_{rr}$	$I_F=1\text{A}, V_R=30\text{V}, di_F/dt=-200\text{A}/\mu\text{s}$		-	26	35	ns
$T_{rr}$	$I_F=30\text{A}, V_R=200\text{V}, di_F/dt=200\text{A}/\mu\text{s}$ $T_j=25^\circ\text{C}$		-	30	-	ns
$I_{RM}$			-	1.5	-	A
$Q_{rr}$			-	23	-	nc
$T_{rr}$	$I_F=30\text{A}, V_R=200\text{V}, di_F/dt=200\text{A}/\mu\text{s}$ $T_j=125^\circ\text{C}$		-	86	-	ns
$I_{RM}$			-	3.7	-	A
$Q_{rr}$			-	160	-	nc

## 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 Junction to Case	$R_{th(j-c)}$	2.5	$^\circ\text{C}/\text{W}$





### 特征曲线 ELECTRICAL CHARACTERISTICS (curves)

Fig.1 TYPICAL FORWARD CHARACTERISTICS

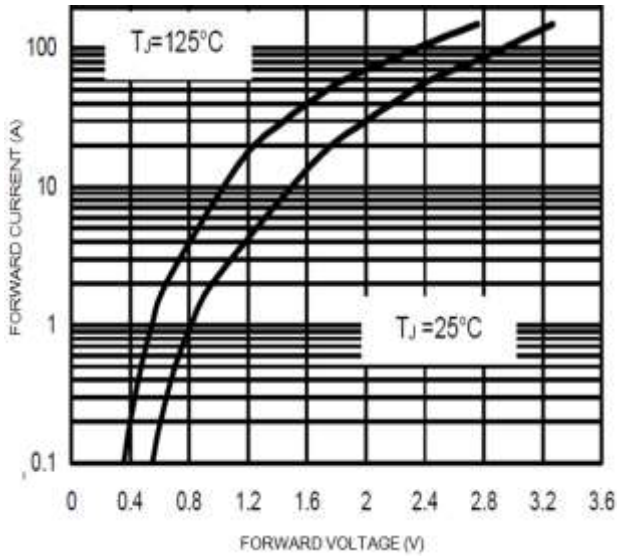


Fig.2 TYPICAL REVERSE CHARACTERISTICS

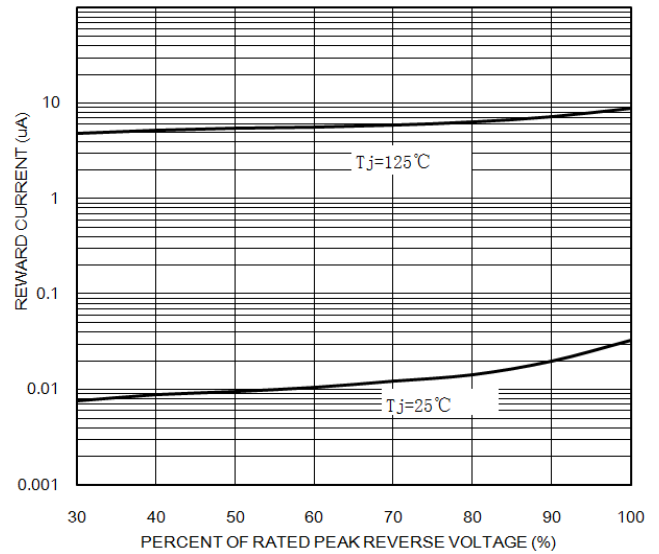


Fig.3 TYPICAL JUNCTION CAPACITANCE

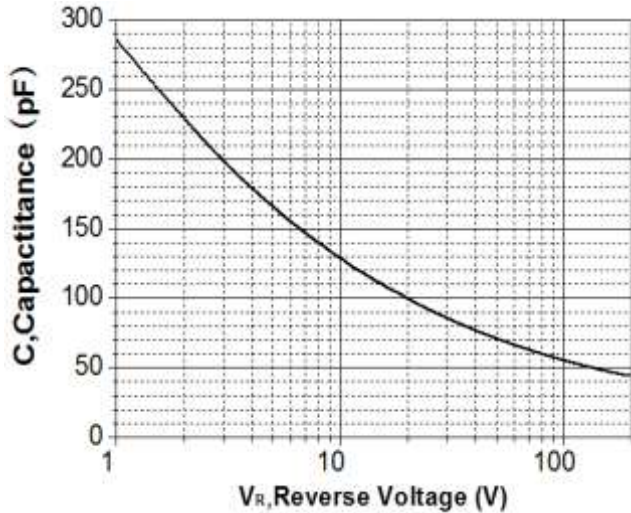


Fig.4 Reverse recovery time versus di/dt

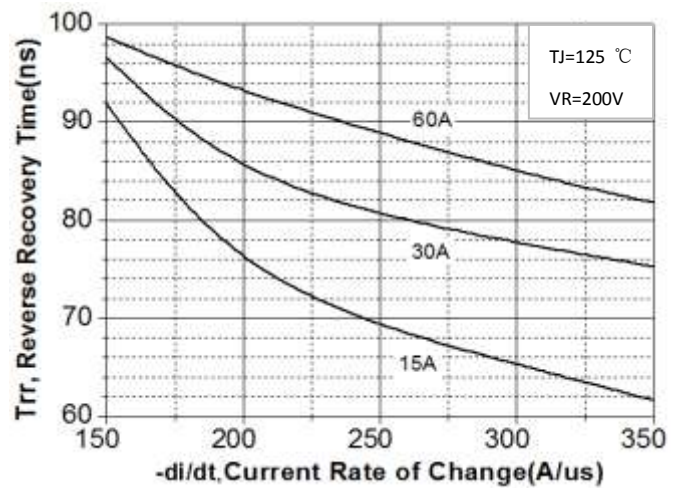


Fig.5 Peak reverse recovery current versus di/dt

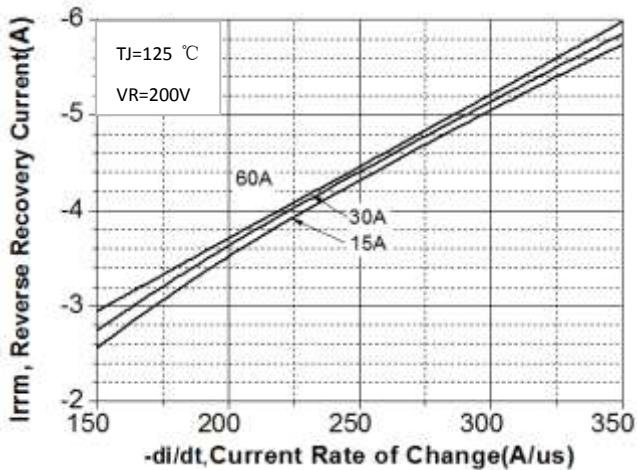
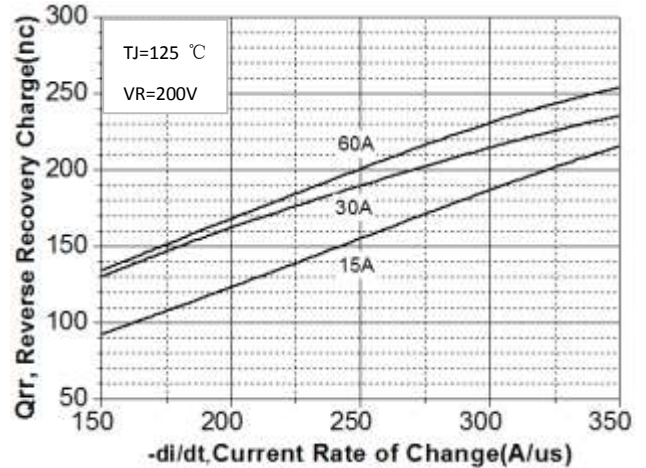


Fig.6 Reverse recovery charges versus di/dt

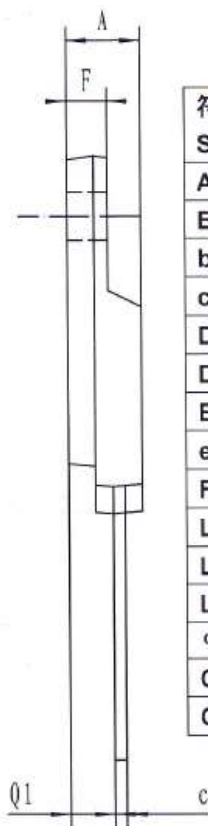
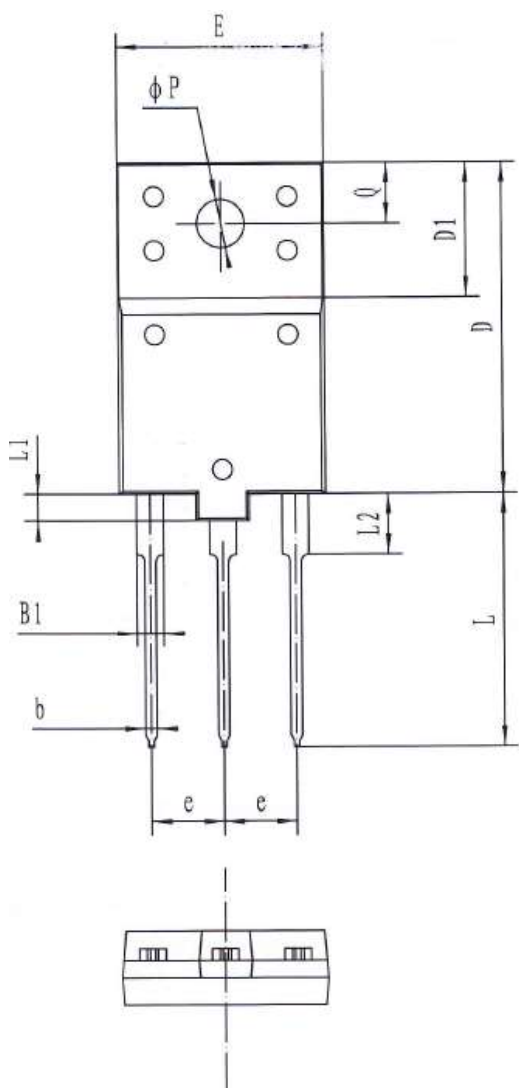




外形尺寸 PACKAGE MECHANICAL DATA

TO-3P(H)IS

单位 Unit : mm



符号 Symbol	Min	Max
A	5.2	5.8
B1	1.8	2.2
b	0.75	1.05
c	0.8	1.1
D	24.0	25.0
D1	9.8	10.2
E	15.0	16.0
e	5.45 (typ)	
F	2.7	3.3
L	18.5	19.5
L1	1.8	2.2
L2	4.3	4.7
$\phi P$	3.4	3.8
Q	4.3	4.7
Q1	3.1	3.5



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