



超快恢复二极管

ULTRAFAST RECOVERY DIODE

FHA60F60B

主要参数 MAIN CHARACTERISTICS

I _{F(AV)}	60(30×2) A
V _{RRM}	600 V
V _{F-typ} (@I _F =30A)	1.92 V
T _J	150 °C

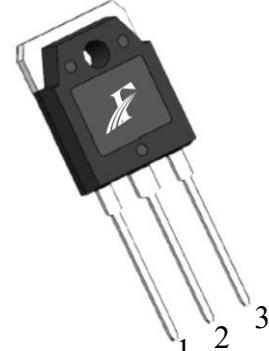
产品特性 FEATURES

低功耗	Low power loss
高抗浪涌电流能力	Improved surge current capability
RoHS 产品	RoHS product
低正向导通电压	Low Forward Voltage Drop

用途 APPLICATIONS

高频、高压、大电流整流二极管	High frequency, high voltage, high current rectifier diode
续流二极管	Freewheeling diode
高频开关电源	High frequency switch power supply
极性保护电路	Polarity protection application
UPS	Uninterrupted Power Supply

封装形式 Package



TO-3PN
FHA series

等效电路 Equivalent Circuit



绝对最大额定值 ABSOLUTE RATINGS (T_c=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 _{RRM}	600	V
正向平均整流电流 Average forward current	I _{F(AV)}	60 30	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 _{FSM}	300	A
最高结温 Maximum junction temperature	T _j	150	°C
储存温度 Storage temperature range	T _{STG}	-40~+150	°C

热特性 THERMAL CHARACTERISTIC

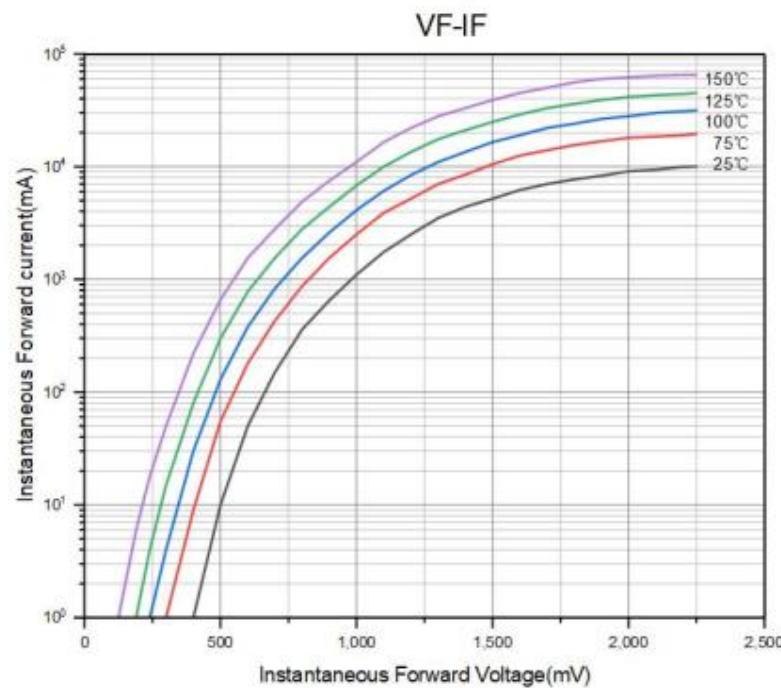
项目 Parameter	符号 Symbol	最大值 Value (max)	单位 Unit
结到管壳的热阻 Thermal resistance from junction to case	R _{th(j-c)}	0.78	°C/W
结到环境的热阻 Thermal Resistance, Junction to Ambient	R _{th(j-A)}	40	°C/W

电特性 ELECTRICAL CHARACTERISTICS

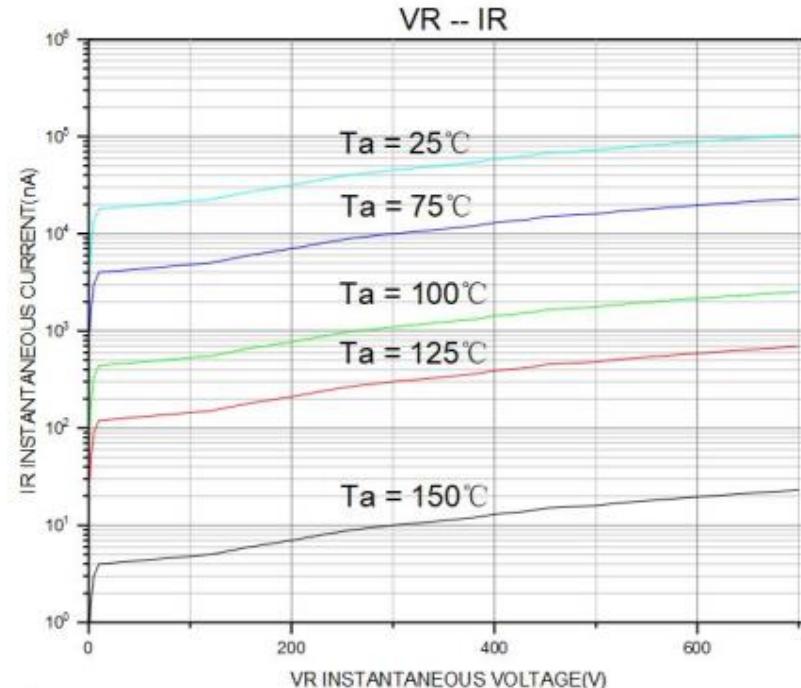
项 目 Parameter	测试条件 Tests conditions		最小值 Value (min)	典型值 Value (typ)	最大值 Value (max)	单位 Unit
I_R	Ta =25°C	V _R =V _{RRM}	-	-	1	μA
	Ta =125°C		-	-	50	μA
V_F	Ta =25°C	I _F =5A	-	1.21	1.4	V
	Ta =125°C		-	1.11	1.3	V
V_F	Ta =25°C	I _F =30A	-	1.92	2.35	V
	Ta =125°C		-	1.82	2.25	V
trr	I _F =0.5A, I _R =1.0A,I _{rr} =0.25A			35	45	ns

特性曲线

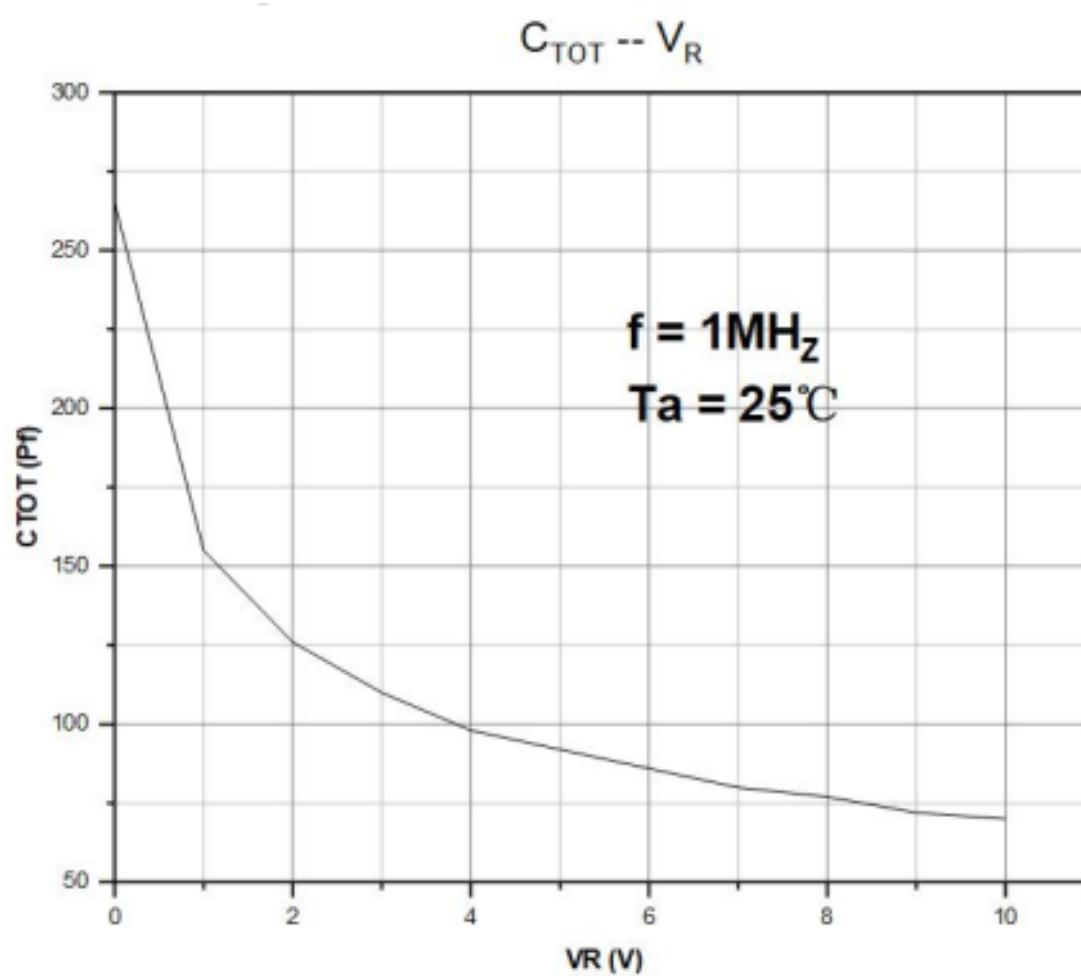
(ELECTRICAL CHARACTERISTICS (curves))



VF-IF

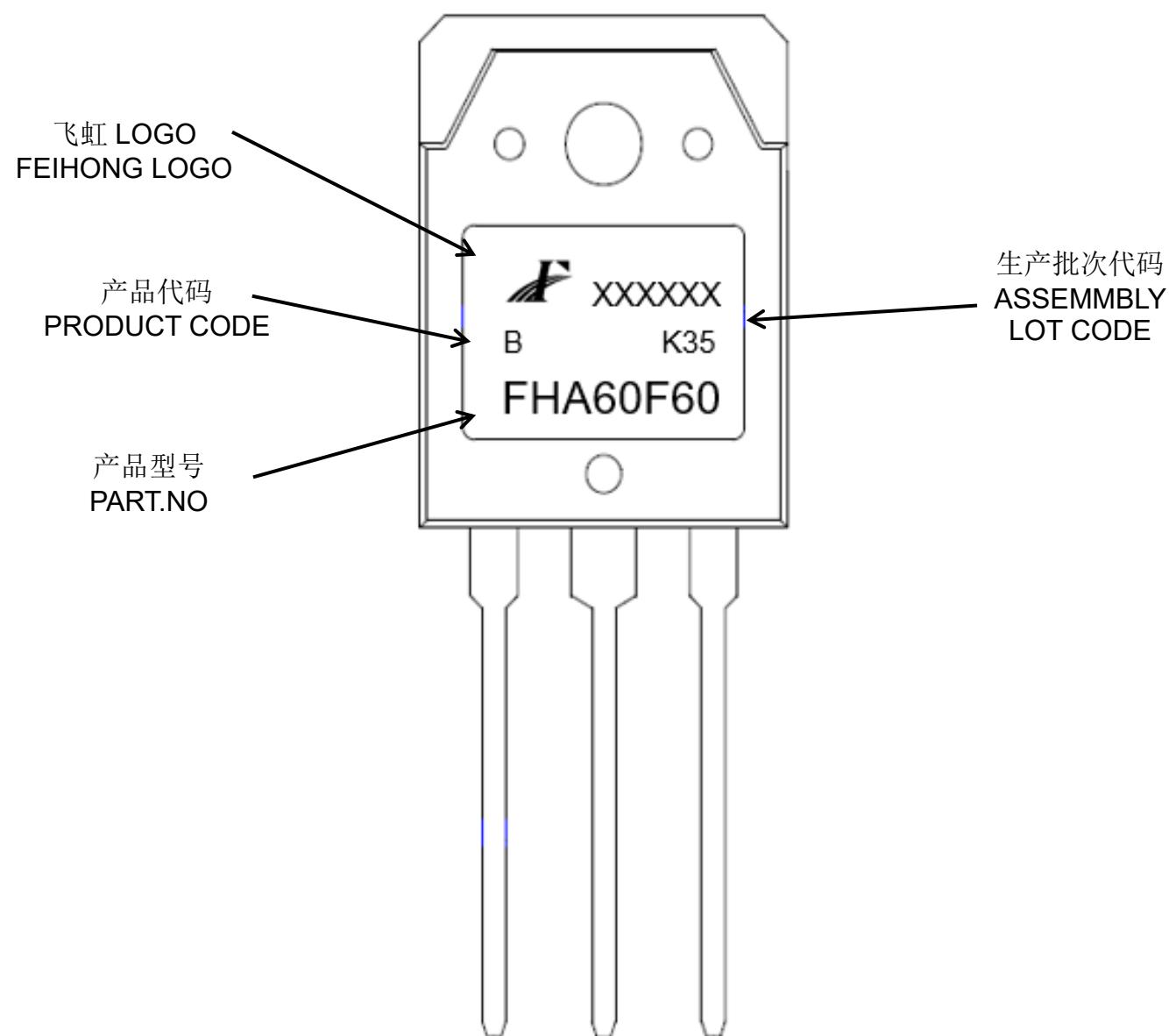


VR-IR



C_{TOT} - V_R

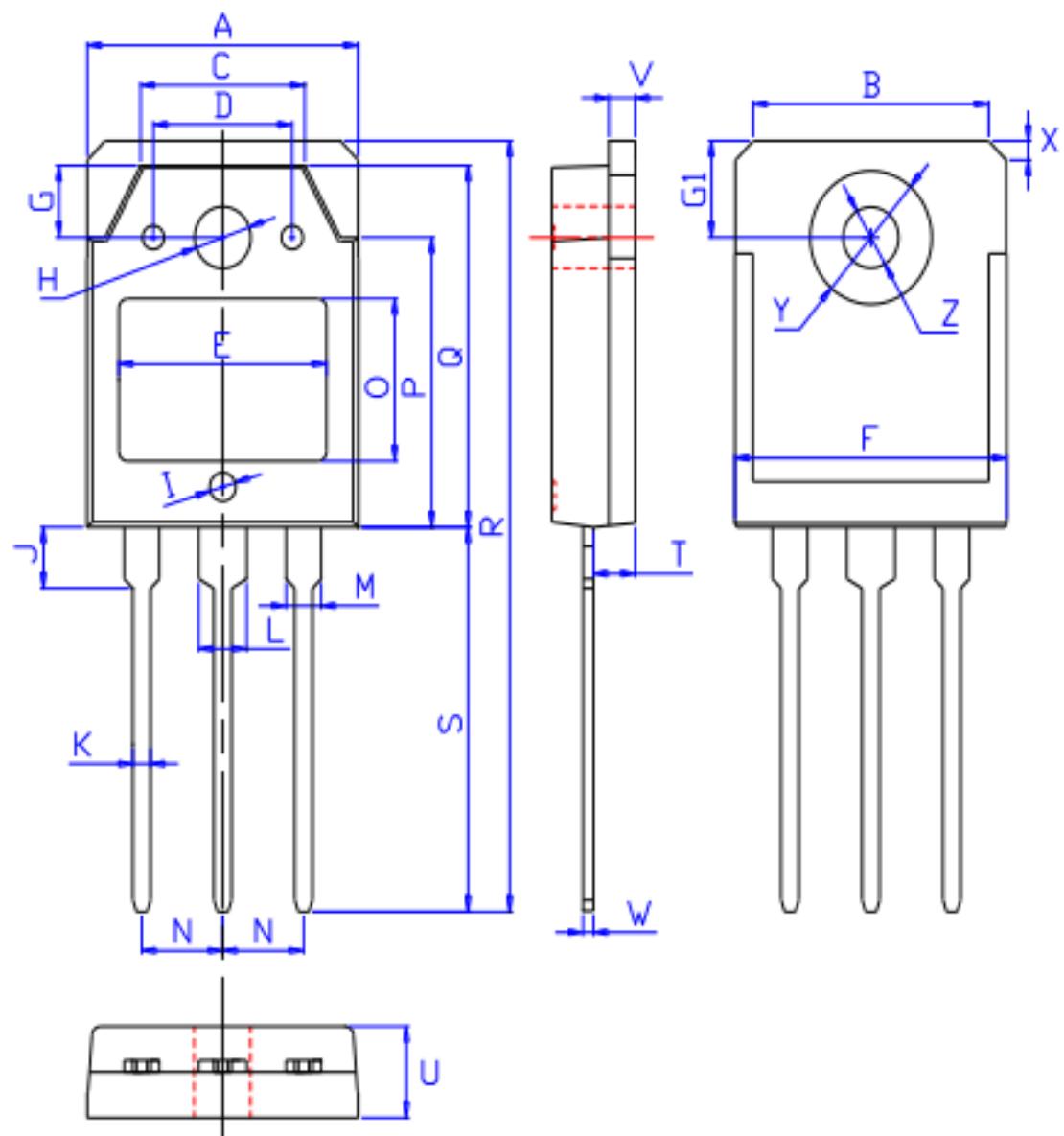
印记 Marking:



外形尺寸：

Package Dimension:

TO-3PN



DIM	MILLIMETERS
A	15.60±0.30
B	13.60±0.30
C	9.50±0.30
D	8.00±0.30
E	11.85±0.30
F	15.65±0.30
G	3.80±0.30
G1	5.00±0.30
H	Φ 3.50±0.30
I	Φ 1.50±0.30 深 0.15±0.15
J	3.20±0.30
K	1.00±0.15
L	3.10±0.15
M	2.10±0.15
N	5.45±0.30
O	8.40±0.30
P	13.90±0.30
Q	18.70±0.30
R	40.00±0.60
S	20.00±0.40
T	2.40±0.30
U	4.80±0.30
V	1.50±0.15
W	0.60±0.15
X	1.80±0.40
Y	7.00±0.30
Z	3.20±0.30

(Units: mm)