



晶体管

TRANSISTOR

TIP42CA

主要参数 MAIN CHARACTERISTICS

Ic	-6A
VCEO	-100V
Pc	65W

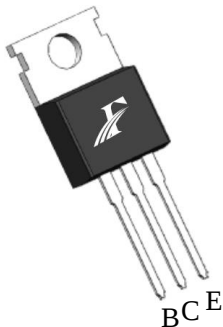
用途 APPLICATIONS

应用于中功率线性转换电路	Medium Power Linear Switching Applications
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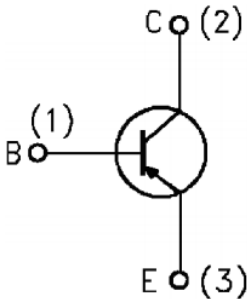
产品特性 FEATURES

硅外延	Epitaxial silicon
高开关速度	High switching speed
与 TIP41C 互补	Complementary to TIP41C
RoHS 产品	RoHS product

封装形式 Package



TO-220



绝对最大额定值 ABSOLUTE RATINGS (Tc=25℃)

项目 Parameter	符号 Symbol	数值 Value	单位 Unit
集电极—基极直流电压 Collector- Base Voltage (IE=0)	VCBO	-100	V
集电极—发射极直流电压 Collector- Emitter Voltage (IB=0)	VCEO	-100	V
发射极—基极直流电压 Emitter-Base Voltage (IC=0)	VEBO	-5	V
最大集电极直流电流 Collector Current (DC)	Ic	-6	A
最大集电极耗散功率 Total Dissipation (TO-92)	Pc	65	W
最高结温 Junction Temperature	Tj	150	℃
贮存温度 Storage Temperature	Tstg	-55~+150	℃

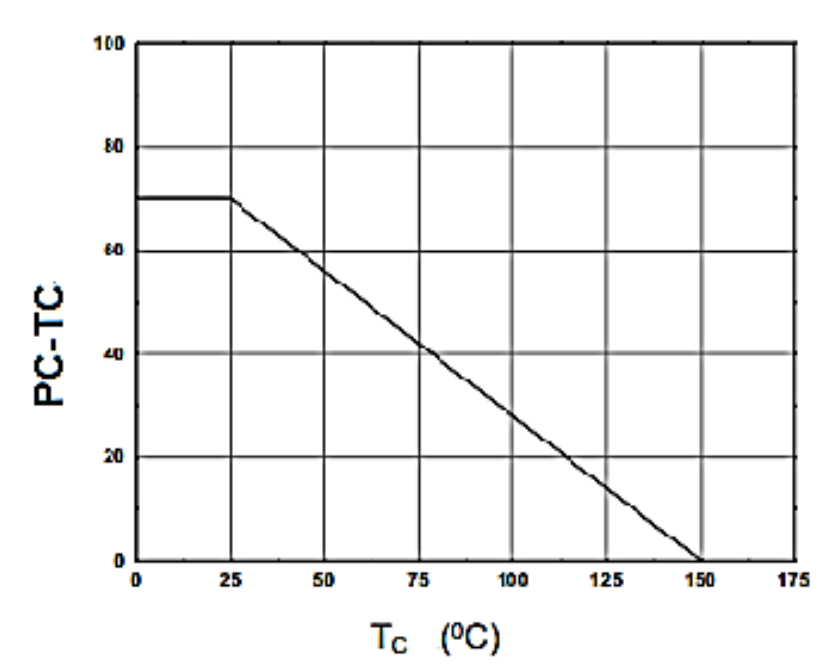
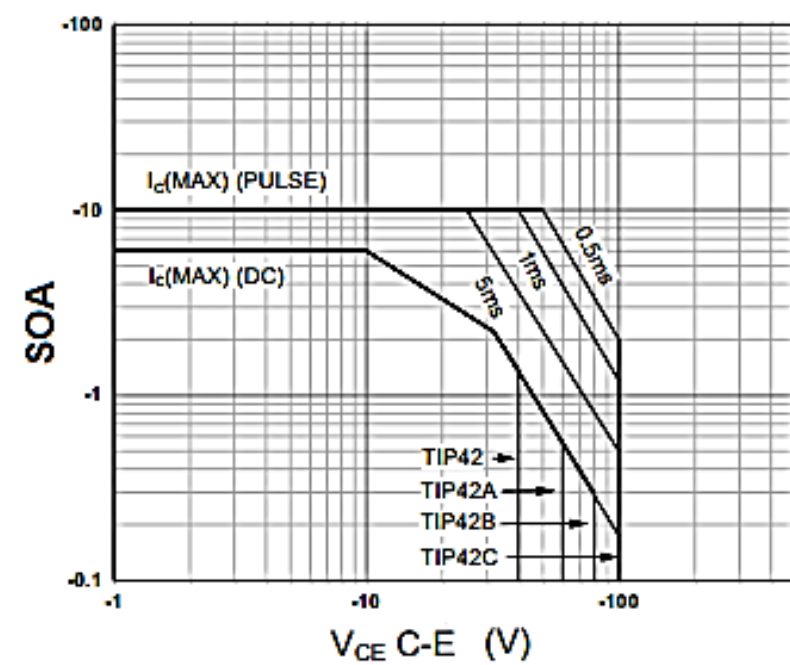
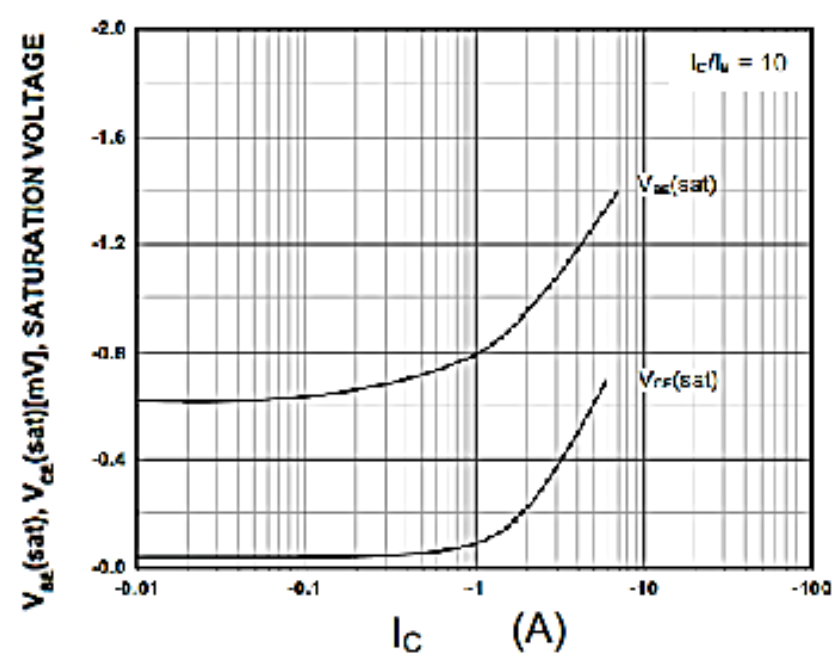
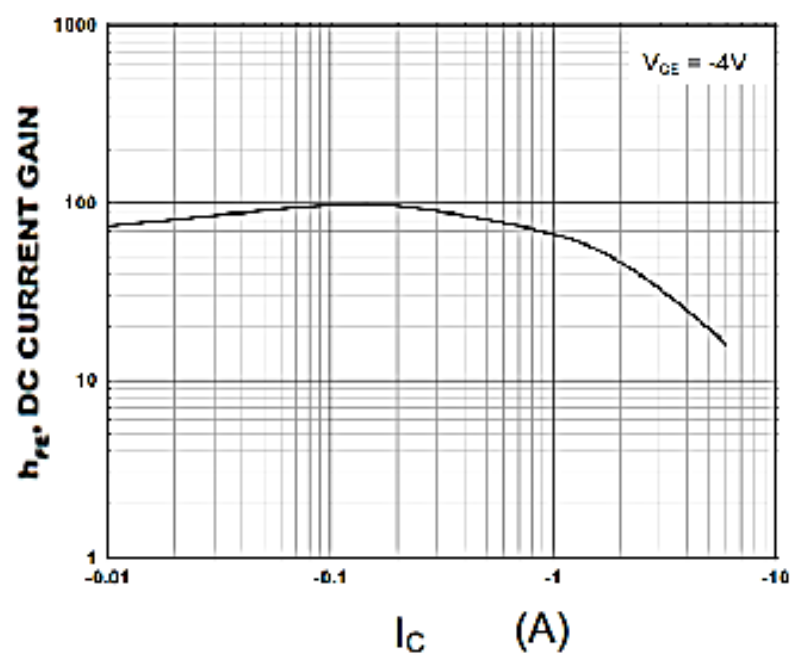
热特性 THERMAL CHARACTERISTIC

项目 Parameter	符号 Symbol	最小值 (min)	最大值 (max)	单位 Unit
结到环境的热阻 Thermal Resistance Junction Ambient	Rth(j-a)	-	125	℃/W

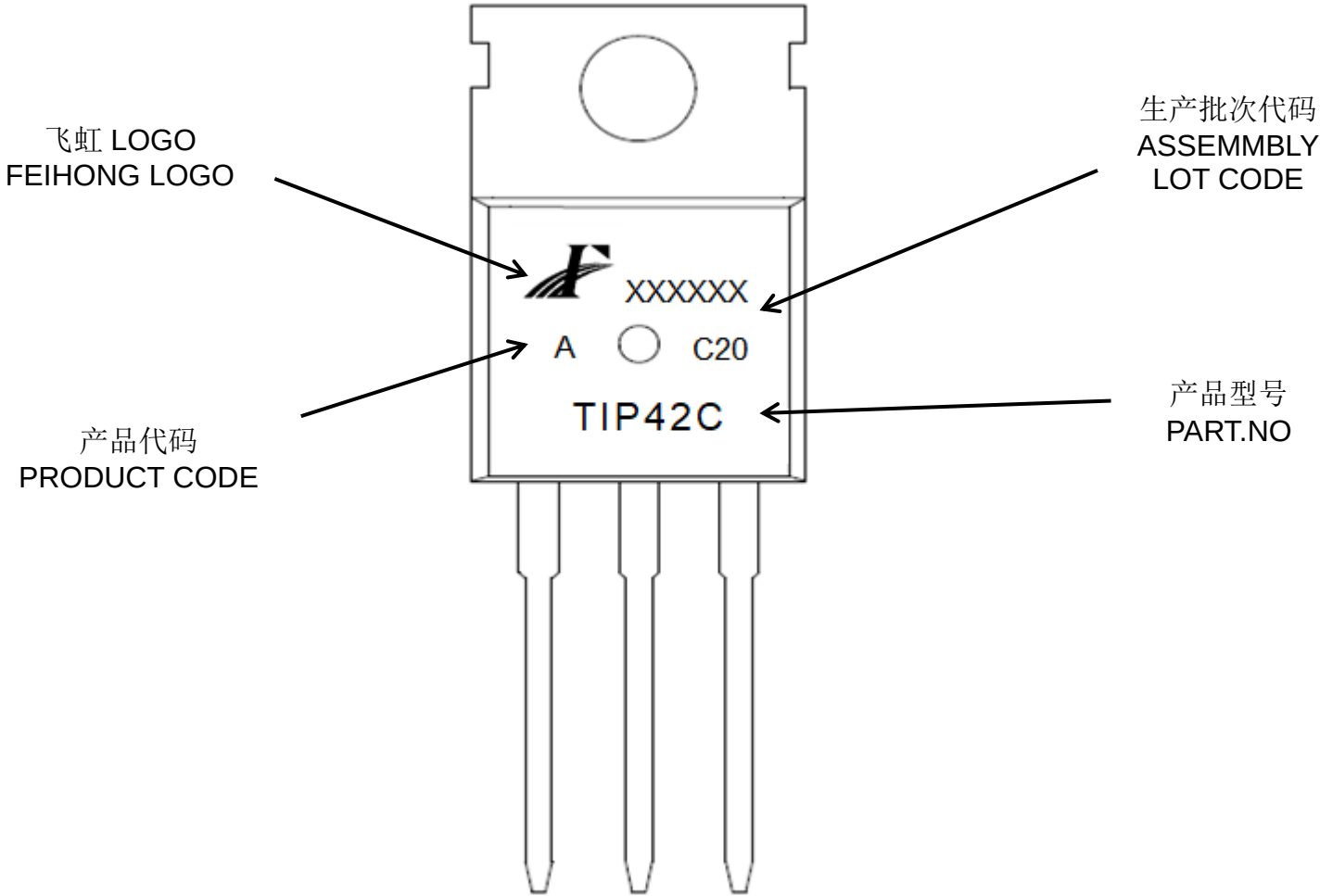
电特性 ELECTRICAL CHARACTERISTICS

项目 Parameter	测试条件 Tests conditions	最小值 (min)	典型值 (typ)	最大值 (max)	单位 Unit
V(BR) _{CBO}	I _C =-100uA, I _E =0	-100	-	-	V
V(BR) _{CEO}	I _C =-10mA, I _B =0	-100		-	V
V(BR) _{EBO}	I _E =-1mA, I _C =0	-5	-	-	V
I _{CEO}	V _{CB} =-100V, I _E =0	-	-	-400	uA
I _{EBO}	V _{EB} =-5V, I _C =0	-	-	-100	uA
Hfe(1)	V _{CE} =-4V, I _C =-3A	15	-	80	
V _{CE(sat)}	I _C -6A, I _B =-0.6A	-	-	-1.5	V
V _{BE(sat)}	I _C =-6A, I _B =-0.6A	-	-	-2.0	V
f _T	V _{CE} =-10V, I _C =-0.5A, f=1MHz	3.0			MHz

特性曲线
Typical Performance Characteristics

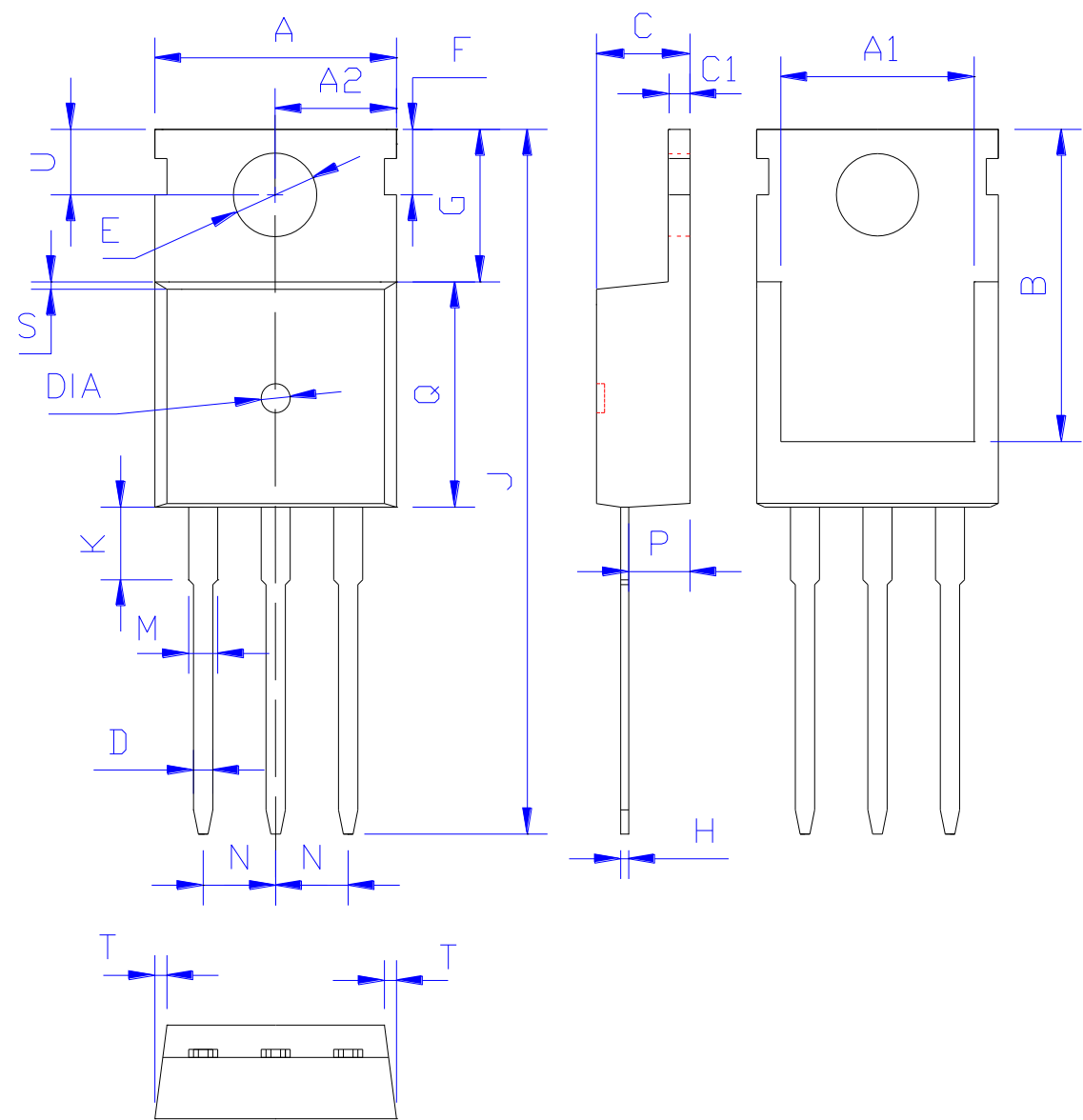


印记 Marking:



外形尺寸:
Package Dimension:

TO-220



DIM	MILLIMETERS
A	10.00±0.30
A1	8.00±0.30
A2	5.00±0.30
B	13.20±0.40
C	4.50±0.20
C1	1.30±0.20
D	0.80±0.20
E	3.60±0.20
F	3.00±0.30
G	6.60±0.40
H	0.50±0.20
J	28.88±0.50
K	3.00±0.30
M	1.30±0.30
N	Typical 2.54
P	2.40±0.40
Q	9.20±0.40
S	0.25±0.15
T	0.25±0.15
U	2.80±0.30
DIA	宽 1.50±0.10 深 0.50 MAX

(Units: mm)