

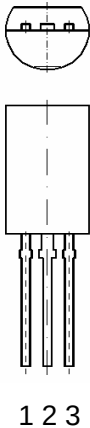
深圳市晶泰源电子有限公司

5609

TRANSISTOR (NPN)

TO-92L

1. EMITTER
2. COLLECTOR
3. BASE



FEATURES

- Excellent linearity of Current Gain
- Low saturation voltage
- Complementary to TPT5610

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V _{CBO}	Collector- Base Voltage	25	V
V _{CEO}	Collector-Emitter Voltage	20	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	1	A
P _C	Collector Power Dissipation	0.75	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =10μA, I _E =0	25			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =1mA, I _B =0	20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =10μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =20V, I _E =0			1	μA
Emitter cut-off current	I _{EBO}	V _{EB} =5V, I _C =0			1	μA
DC current gain	h _{FE}	V _{CE} =2V, I _C =500mA	60		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =800mA, I _B =80mA			0.5	V
Base-emitter voltage	V _{BE}	V _{CE} =2V, I _C =500mA			1	V
Transition frequency	f _T	V _{CE} =2V, I _C =500mA		190		MHz
Collector output capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		22		pF

CLASSIFICATION OF h_{FE}

Rank	A	B	C
Range	60-120	85-170	120-240