

TIGER ELECTRONIC CO.,LTD

TO-92 Plastic-Encapsulate Transistors

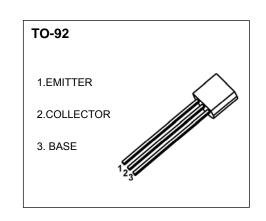
C945 TRANSISTOR (NPN)

FEATURE

- Excellent h_{FE} linearity
- Low noise
- Complementary to A733

MAXIMUM RATINGS (Ta=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit	
V _{CBO}	Collector-Base Voltage	60	V	
V _{CEO}	Collector-Emitter Voltage	50	V	
V _{EBO}	Emitter-Base Voltage	5	V	
Ic	Collector Current -Continuous	150	mA	
Pc	Collector Power Dissipation	400	mW	
TJ	Junction Temperature	125	℃	
T _{stg}	Storage Temperature	-55-125	℃	



ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	$I_C=1$ mA , $I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I _C =100μA , I _B =0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I _E =100 μA, I _C =0	5			V
Collector cut-off current	I _{CBO}	V _{CB} =60V, I _E =0			0.1	μΑ
Collector cut-off current	I _{CEO}	V _{CE} =45V, I _B =0			0.1	μΑ
Emitter cut-off current	I _{EBO}	V _{EB} =5V ,I _C =0			0.1	μA
DC ourrent gain	h _{FE(1)}	V _{CE} =6V , I _C =1mA	70		700	
DC current gain	h _{FE(2)}	V _{CE} =6V , I _C =0.1mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =100mA, I _B =10mA			0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =100mA, I _B =10mA			1	V
Transition frequency	f⊤	V _{CE} =6V,I _C =10mA,f=30MHz	200			MHz
Collector output capacitance	Cob	V _{CB} =10V,I _E =0,f=1MH _Z			3.0	pF
Noise figure	NF	VCE=6V,Ic=0.1mA		10		dB
INOISE IIGUIE		Rg=10kΩ,f=1MHz				

CLASSIFICATION OF h_{FE(1)}

Rank	0	Υ	GR	BL
Range	70-140	120-240	200-400	350-700