TO-92 Plastic-Encapsulate Transistors

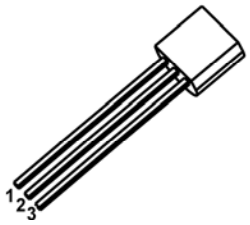
3DG3332 TRANSISTOR (NPN)

TO – 92

1.EMITTER

2. COLLECTOR

3.BASE



FEATURES

- Low Current
- High Voltage

APPLICATIONS

- Video
- Telepho ny
- Professional Communication Equipment

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current	0.7	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 0.01mA,I_E=0 180				V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0 160				V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0 6				V
Collector cut-off current	I_{CBO}	V_{CB}=120V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C=100mA 100			400	
	$h_{FE(2)}$	V_{CE}=5V, I_C=10mA 80				
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	I_C=250mA,I_B=25mA			0.4	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=250mA,I_B=25mA			1.2	V
Transition frequency	f_T	V_{CE}=10V,I_C=50mA	120			MHz
Collector output capacitance	C_{ob} V	$_{CB}$=10V,I_E=0, f=1MHz	8			pF

CLASSIFICATION OF $h_{FE(1)}$

RANK R		S	T
RANGE	100-200 140-	280	200-400