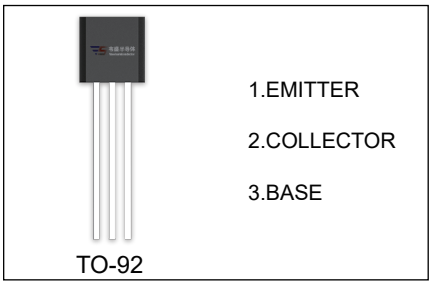
3DG3332 TRANSISTOR (NPN)



FEATURES

- High breakdown voltage
- Excellent h_{FE} linearity
- Large current capacity and wide ASO

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
3DG3332	TO-92	Bulk	1000pcs/Bag
3DG3332-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	CollectorE-mitteVoltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	0.7	A
P_C	Collector Power Dissipation	0.625	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=10μA,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=10μA,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	$V_{CE(sat)}$	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
Collector output capacitance	C_{ob}	V_{CB}=10V, f=1MHz		8		pF
Transition frequency	f_T	V_{CE}=10V,I_C=50mA		120		MHz
Turn-on Time	t_{on}	V_{CC}=100V,I_C=300mA, I_{B1}=-I_{B2}=15mA			0.05	μs
Storage Time	t_{stg}				1	μs
Fall Time	t_f				0.06	μs

CLASSIFICATION of $h_{FE(1)}$

Rank	R	S	T
Range	100-200	140-280	200-400