



3DG122



NPN Silicon High Frequency Middle Power Transistor

Features:

1. Using epitaxy planar technology structure. High working frequency. Metallic packaging.
2. Small volume, light weight, easy installation.
3. Use for high frequency oscillation, high frequency small signal amplification, low power source adjustment circuit.
4. Quality Class: GS, G. Implementation of standards: QZJ840611

TECHNICAL DATA:

($T_a = 25^\circ\text{C}$)

Parameter name	Symbols	Unit	Specifications				Test Condition
			A	B	C	D	
Total Dissipation	P_{tot}	mW	500				$T_a=25^\circ\text{C}$
Max. Collector Current	I_{CM}	mA	100				
Junction Temperature	T_{jm}	$^\circ\text{C}$	175				
Storage Temperature	T_{stg}	$^\circ\text{C}$	-55~+175				
C-B Breakdown Voltage	$V_{(BR)CBO}$	V	40	60	40	60	$I_c=0.1\text{mA}$
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	30	45	30	45	
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	4				$I_E=0.1\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.5				$I_c=50\text{mA}$ $I_B=5\text{mA}$
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	1.0				
C-B Leakage Current	I_{CBO}	μA	0.1				$V_{CB}=10\text{V}$
C-E Leakage Current	I_{CEO}	μA	0.2				$V_{CE}=10\text{V}$
E-B Leakage Current	I_{EBO}	μA	0.1				$V_{EB}=1.5\text{V}$
DC Current Gain	h_{FE}		25~270				$V_{CE}=10\text{V}, I_c=30\text{mA}$
Transition frequency	f_T	MHz	500	500	700	700	$V_{CE}=10\text{V}, I_c=30\text{mA}$ $f=100\text{MHz}$

h_{FE} Colored:

Color	Orange	Yellow	Green	Blue	Purple	Gray
h_{FE}	25~40	40~55	55~80	80~120	120~180	180~270

Outline and Dimensions: