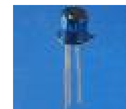
3DG101, 3DG110, 3DG111



NPN Silicon High Frequency Low 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°C)**

Parameter name	Symbols	Unit	Specifications						
			3DG101			3DG110		3DG111	
			A	B	C	D	E	F	Test Condition
C-B Breakdown Voltage	$V_{(BR)CBO}$	V	20	30	40	20	30	40	I_C=0.1mA
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	15	20	30	15	20	30	
E-Base Breakdown Voltage	$V_{(BR)EBO}$	V	≥4 (I_E=0.1mA)			≥4 (I_E=0.1mA)		≥4 (I_E=0.1mA)	
Total Dissipation	P_{tot}	mW	100 (T_a=25°C)			300 (T_a=25°C)		300 (T_a=25°C)	
Max. Collector Current	I_{CM}	mA	20			50		50	
Junction Temperature	T_{jm}	°C	175						
Storage Temperature	T_{stg}	°C	-55~+175						
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.35 (I_C=10mA, I_B=1mA)			1.0 (I_C=10mA, I_B=1mA)		0.35 (I_C=10mA, I_B=1mA)	
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	1.0 (I_C=10mA, I_B=1mA)						
C-B Leakage Current	I_{CBO}	uA	0.01(V_{CB}=10V)			0.1(V_{CB}=10V)			
C-E Leakage Current	I_{CEO}	uA	0.01(V_{CE}=10V)			0.1(V_{CE}=10V)			
E-B Leakage Current	I_{EBO}	uA	0.01(V_{EB}=1.0V)			0.1(V_{EB}=1.0V)		0.1(V_{EB}=1.5V)	
DC Current Gain	h_{FE}		25~270 (V_{CE}=10V, I_C=0.5mA)			25~270 (V_{CE}=10V, I_C=10mA)			
Transition frequency	f_T	MHz	A~C:150,D~F:300 (V_{CE}=10V, I_C=10mA, f=100MHz)						

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: