



3DG180



NPN Silicon High Reverse Voltage 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	E	F	G	H	I	J	K	L	M	N	
Total Dissipation	P_{tot}	mW	300														$T_a=25^\circ\text{C}$
Max. Collector Current	I_{CM}	mA	20														
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	60	100	140	180	220	260	300	60	100	140	180	220	260	300	$I_c=0.1\text{mA}$
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	60	100	140	180	220	260	300	60	100	140	180	220	260	300	
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	5														$I_E=0.1\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.8														$I_c=100\text{mA}$ $I_B=10\text{mA}$
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	1.0														
C-B Leakage Current	I_{CBO}	μA	0.5														$V_{CB}=30\text{V}$
C-E Leakage Current	I_{CEO}	μA	1.0														$V_{CE}=30\text{V}$
E-B Leakage Current	I_{EBO}	μA	0.5														$V_{EB}=1.0\text{V}$
DC Current Gain	h_{FE}		25~180														$V_{CE}=10\text{V}, I_c=20\text{mA}$
Transition frequency	f_T	MHz	50							100							$V_{CE}=10\text{V}, I_c=20\text{mA}$ $f=30\text{MHz}$

h_{FE} Colored:

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

Outline and Dimensions: