



# 3DG182



## 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	
Total Dissipation	$P_{tot}$	mW	700										$T_a=25^\circ\text{C}$
Max. Collector Current	$I_{CM}$	mA	300										
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	60	100	140	180	220	$I_c=0.1\text{mA}$
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	60	100	140	180	220	60	100	140	180	220	
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	5										$I_E=0.1\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	1.0										$I_c=200\text{mA}, I_B=20\text{mA}$
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	1.2										
C-B Leakage Current	$I_{CBO}$	$\mu\text{A}$	1.0										$V_{CB}=30\text{V}$
C-E Leakage Current	$I_{CEO}$	$\mu\text{A}$	2.0										$V_{CE}=30\text{V}$
E-B Leakage Current	$I_{EBO}$	$\mu\text{A}$	1.0										$V_{EB}=1.5\text{V}$
DC Current Gain	$h_{FE}$		25~180										$V_{CE}=2\text{V}, I_c=200\text{mA}$
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: