



# 3DA102

## NPN Silicon High Frequency High Power Transistor



### Features:

1. Excellent second breakdown capacity. Good characteristic frequency.
2. Amplification factor of small current is great. Good voltage resistance.
3. Implementation of standards: GJB33 A-97, QZJ840611A, QZJ840611
4. Use for analog computer power output, amplification of high frequency, middle frequency and low frequency, switching circuit.
5. Quality Class: JP, JT, JCT, GS, G, G+

### TECHNICAL DATA:

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

Parameter name	Symbols	Unit	Specifications	Test Condition
Total Dissipation	$P_{tot}$	W	7.5	$T_c: 75^\circ\text{C}$
Max. Collector Current	$I_{CM}$	A	1.0	
Junction Temperature	$T_{jm}$	$^\circ\text{C}$	175	
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-55~+175	
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	V	30~50	$I_c=2\text{mA}$
E-Base Breakdown Voltage	$V_{(BR)EBO}$	V	5	$I_E=2\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	1.5	$I_c=0.5\text{A}, I_B=0.1\text{A}$
Collector-Emitter Leakage Current	$I_{CEO}$	mA	2.0	$V_{CE}=20\text{V}$
Emitter-Base Leakage Current	$I_{EBO}$	mA	2.0	$V_{EB}=5\text{V}$
DC Current Gain	$h_{FE}$		10	$V_{CE}=5\text{V}, I_c=0.3\text{A}$
Transition frequency	$f_T$	MHz	100	$V_{CE}=5\text{V}, I_c=0.2\text{A}$ $f_o=10\text{ MHz}$

### Outline and Dimensions: