



# 3DA75

## 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
			A	B	C	D	E	F	G	
Total Dissipation	$P_{tot}$	W	75							$T_c: 75^\circ\text{C}$
Max. Collector Current	$I_{CM}$	A	7.5							
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	25	50	100	150	200	250	300	$I_c=1\text{mA}$
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	25	50	100	150	200	250	300	$I_c=1\text{mA}$
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	5							$I_E=1\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.8							$I_c=3.5\text{A}, I_B=0.7\text{A}$
Collector-Base Leakage Current	$I_{CBO}$	mA	1.0							$V_{CB}=20\text{V}$
Collector-Emitter Leakage Current	$I_{CEO}$	mA	1.0							$V_{CE}=20\text{V}$
Base-Emitter Leakage Current	$I_{BEO}$	mA	2.0							$V_{EB}=2\text{V}$
DC Current Gain	$h_{FE}$		Red:15~25		Orange:25~40		Yellow:40~55			$V_{CE}=5\text{V},$ $I_c=3.5\text{A}$
			Green:55~80		Blue:80~120		Purple:120~180			
Transition frequency	$f_T$	MHz	30							$V_{CE}=10\text{V}, I_c=0.5\text{A}$ $f_o=10\text{MHz}$

### Outline and Dimensions: