



# 3DK8



## NPN Silicon High Frequency M-Power Switch 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 and high frequency switch, high frequency small signal amplification, low power source adjustment circuit.
4. Quality Class: GS, G. Implementation of standards: QZJ840611

### TECHNICAL DATA:

(Ta = 25°C)

Parameter name	Symbols	Unit	Specifications					Test Condition
			A	B	C	D	E	
Total Dissipation	$P_{tot}$	mW	500					Ta=25°C
Max. Collector Current	$I_{CM}$	mA	200					
Junction Temperature	$T_{jm}$	°C	175					
Storage Temperature	$T_{stg}$	°C	-55~+175					
C-B Breakdown Voltage	$V_{(BR)CBO}$	V	20	40	60	20	40	Ic=0.1mA
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	15	30	45	15	30	
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	5					I <sub>E</sub> =0.1mA
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.4					Ic=50mA I <sub>B</sub> =5mA
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	1.0					
C-E Leakage Current	$I_{CEO}$	uA	0.5					V <sub>CE</sub> =10V
DC Current Gain	$h_{FE}$		Orange: 25~40, Yellow: 40~55, Green: 55~80 Blue: 80~120, Purple: 120~180					V <sub>CE</sub> =1V, Ic=50mA
Transition frequency	$f_T$	MHz	150					V <sub>CE</sub> =10V, Ic=50mA f=30MHz
Turn-on Time	$t_{on}$	ns	40					Ic=300mA I <sub>B1</sub> = I <sub>B2</sub> =30mA
Storage Time	$t_s$	ns	100	100	50	50	50	
Fall Time	$t_f$	ns	50					

### Outline and Dimensions: