



3DK103



NPN Silicon High Frequency Low 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:

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

Parameter name	Symbols	Unit	Specifications			Test Condition
			A	B	C	
Total Dissipation	P_{tot}	mW	300			$T_a=25^\circ\text{C}$
Max. Collector Current	I_{CM}	mA	50			
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	20	40	60	$I_c=0.1\text{mA}$
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	15	35	45	
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	4			$I_E=0.1\text{mA}$
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.3			$I_c=30\text{mA}$ $I_B=3\text{mA}$
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	0.9			
C-E Leakage Current	I_{CEO}	μA	0.1			$V_{CE}=10\text{V}$
DC Current Gain	h_{FE}		Orange: 25~40, Yellow: 40~55, Green: 55~80 Blue: 80~120, Purple: 120~180			$V_{CE}=1\text{V}, I_c=30\text{mA}$
Transition frequency	f_T	MHz	200			$V_{CE}=10\text{V}, I_c=20\text{mA}$ $f=100\text{MHz}$
Turn-on Time	t_{on}	ns	50			$I_c=30\text{mA}$ $I_{B1}= I_{B2}=3\text{mA}$
Storage Time	t_s	ns	35			
Fall Time	t_f	ns	30			

Outline and Dimensions: