

3DK102, 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:**(Ta = 25°C)**

Parameter name	Symbols	Unit	Specifications						
			3DK102				3DK103		
			A	B	C	D	A	B	C
Total Dissipation	P_{tot}	mW	300 (Ta=25°C)				30 (Ta=25°C)		
Max. Collector Current	I_{CM}	mA	50				50		
Junction Temperature	T_{jm}	°C	175						
Storage Temperature	T_{stg}	°C	-55~+175						
C-B Breakdown Voltage	$V_{(BR)CBO}$	V	20	30	20	30	20	40	60
			Ic=0.1mA						
C-E Breakdown Voltage	$V_{(BR)CEO}$	V	15	25	15	25	15	35	45
			Ic=0.1mA						
E-B Breakdown Voltage	$V_{(BR)EBO}$	V	≥4 (I _E =0.1 mA)						
Collector- Emitter Saturation Voltage Drop	$V_{CE(sat)}$	V	0.3 (I _C =30mA, I _B =3mA)				0.3 (I _C =30mA, I _B =3mA)		
Base- Emitter Saturation Voltage Drop	$V_{BE(sat)}$	V	0.9 (I _C =30mA, I _B =3mA)				0.9 (I _C =30mA, I _B =3mA)		
C-E Leakage Current	I_{CEO}	uA	0.1 (V _{CE} =10V)				0.1 (V _{CE} =10V)		
DC Current Gain	h_{FE}		Orange:25~40, Yellow:40~55, Green:55~80, Blue:80~120, Purple:120~180						
			(V _{CE} =1V, I _C =30mA)				(V _{CE} =1V, I _C =30mA)		
Transition frequency	f_T	MHz	300 (V _{CE} =10V, I _C =20mA, f=100MHz)				200 (V _{CE} =10V, I _C =20mA, f=100MHz)		
Turn-on Time	I _C =30mA I _{B1} = I _{B2} =3mA	t_{on}	ns		40				
Storage Time		t_s	ns		30		15		
Fall Time		t_f	ns		20				

Outline and Dimensions: