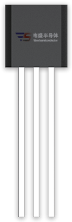
2N4124 TRANSISTOR (NPN)



FEATURES

- High DC Current Gain
- High Transition Frequency

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2N4124	TO-92	Bulk	1000pcs/Bag
2N4124-TA	TO-92	TAPE	2ooopcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	30	V
V_{CEO}	Collector-Emitter Voltage	25	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.2	A
P_D	Collector Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance rom Junction to Ambient	357	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

T_a=25 ℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= 0.01mA,I_E=0	30			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	25			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=0.01mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V,I_E=0			50	nA
Emitter cut-off current	I_{EBO}	V_{EB}=3V,I_C=0			50	nA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C=2mA	120		360	
	$h_{FE(2)}$	V_{CE}=1V, I_C=50mA	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA,I_B=5mA			0.3	V
Base-emitter saturation voltage	$V_{BE\ (sat)}$	I_C=50mA,I_B=5mA			0.95	V
Collector output capacitance	C_{ob}	V_{CB}=5V,I_E=0, f=1MHz			4	pF
Transition frequency	f_T	V_{CE}=20V,I_C=10mA, f=100MHz	300			MHz