

NK20N7G

TRANSISTOR (NPN)

FEATURES

Power dissipation

P_{CM} : 0.2 W ($T_{amb}=25^{\circ}C$)

Collector current

I_{CM} : 0.1 A

Collector-base voltage

$V_{(BR)CBO}$: 20 V

Operating and storage junction temperature range

T_J, T_{stg} : $-55^{\circ}C$ to $+150^{\circ}C$

SOT-23



1. BASE
2. EMITTER
3. COLLECTOR

ELECTRICAL CHARACTERISTICS ($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	12			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	3			V
Collector cut-off current	I_{CBO}	$V_{CB}=10V, I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=1V, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}=10V, I_C=20mA$	50		250	
Transition frequency	f_T	$V_{CE}=10V, I_C=20mA$		7		GHz
Noise figure	NF	$V_{CE}=10V, I_C=7mA, f=1GHz$			2	dB