

GAE

GREAT AMERICAN ELECTROINCS

2N3020

Silicon NPN transistor 2N3020 is intended for high frequency amplifier applications.

Package Type: TO-39

ABSOLUTE MAXIMUM RATINGS ($T_{CASE} = 25^{\circ}C$)

SYMBOL	Rating	VALUE	UNIT
V_{CER}	Collector-Emitter Voltage $R_{EB}=3.0 K\Omega$	120	Vdc
V_{CEO}	Collector-Emitter Voltage	90	Vdc
V_{EB}	Emitter-Base Voltage	7.0	Vdc
I_C	Collector Current	1	Adc
P_D	Total Device Dissipation		W
	@ $T_A=25^{\circ}C$	0.8	
	@ $T_C=25^{\circ}C$	5.0	
T_j	Junction Temperature	150	$^{\circ}C$

Electrical Characteristics ($T_{CASE}=25^{\circ}C$)

Off Characteristics

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
$V_{CEO}(sus)$	Collector-Emitter Sustaining Voltage $I_C=30mAdc, I_B=0$	90		Vdc
$V_{CER}(sus)$	Collector -Emitter sustaining Voltage $I_C=100\mu Adc, R_{BE}=3.0K\Omega$	120		Vdc
I_{CBO}	Collector Cutoff Current $V_{CB}=90Vdc, I_E=0$.01	μAdc

On Characteristics

hFE	DC Current Gain $I_C=150mAdc, V_{CE}=10Vdc$	40	120	
V_{CE}	Collector-Emitter Saturation Voltage $I_C=150mAdc, I_B=15mAdc$		0.3	Vdc
V_{BE}	Base-Emitter Saturation Voltage $I_C=150mAdc, I_B=15mAdc$		1.1	Vdc

Dynamic Characteristics

f_T	Current-Gain-Bandwidth Product $I_C=50mAdc, V_{CE}=10Vdc, f=5.0MHz$		50	MHz
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