



Micro Commercial Components



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2SA1020L-O 2SA1020L-Y

PNP Plastic-Encapsulate Transistor

Features

- Halogen free available upon request by adding suffix "-HF"
- Collector of 0.9Watts of Power Dissipation.
- Collector-current -2.0A
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)

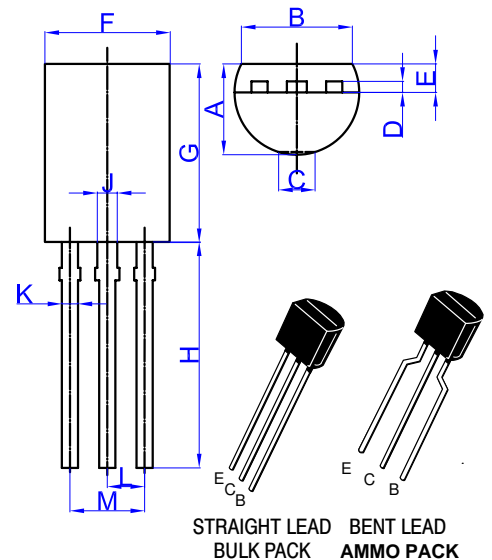
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=-10mA$, $I_B=0$)	-50	---	Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=-100\mu A$, $I_E=0$)	-50	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=-100mA$, $I_C=0$)	-5.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=-50Vdc$, $I_E=0$)	---	-1.0	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=-5.0Vdc$, $I_C=0$)	---	-1.0	μA
$h_{FE(1)}$	DC Current Gain ($I_C=-0.5Adc$, $V_{CE}=-2.0Vdc$)	70	240	---
$h_{FE(2)}$	DC Current Gain ($I_C=-1.5Adc$, $V_{CE}=-2.0Vdc$)	40	---	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=-1Adc$, $I_B=-50mA$)	---	-0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=-1.0Adc$, $I_B=-50mA$)	---	-1.2	Vdc
f_T	Transistor Frequency ($I_C=-500mA$, $V_{CE}=-2.0Vdc$)	100(Typ)		MHz
C_{ob}	Collector output capacitance ($I_E=0$, $V_{CB}=-10Vdc$, $f=1MHz$)	40(Typ)		pF
t_{on}	Turn-On time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$)	0.1(Typ)		us
t_s	Storage time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$)	1.0(Typ)		us
t_f	Fall time ($I_{B1}=-I_{B2}=-0.05$, $V_{CC}=-30Vdc$, $I_C=-1Adc$)	0.1(Typ)		us

CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	70-140	120-240

TO-92L



DIM	DIMENSIONS				NOTE
	MM		INCHES		
A	3.700	4.100	.146	.161	
B	4.000	---	.157	---	
C	0.000	0.300	0.000	0.012	
D	0.350	0.450	.014	.018	
E	1.280	1.580	.050	.062	
F	4.700	5.100	.185	.201	
G	7.800	8.200	.307	.323	
H	13.80	14.20	.543	.559	
J	.800	.800	.024	.031	
K	0.350	.550	.014	.022	
L	1.270		.050		Straight Lead
M	2.200	2.800	.086	.110	Bent Lead
	2.440	2.640	.096	.104	Straight Lead
M	4.400	5.600	.173	.220	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.



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Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 50Kpcs/Carton

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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