



Micro Commercial Components

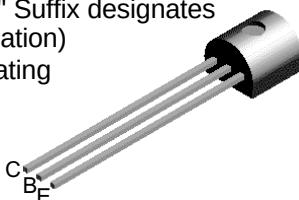


Micro Commercial Components
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S9018-G
S9018-H
S9018-I

Features

- TO-92 Plastic-Encapsulate Transistors
- Capable of 0.31Watts($T_{amb}=25^{\circ}\text{C}$) of Power Dissipation.
- Collector-current 0.05A
- Collector-base Voltage 25V
- Operating and storage junction temperature range: -55°C to $+150^{\circ}\text{C}$
- Marking : S9018
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1



Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu\text{Adc}$, $I_E=0$)	25	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=0.1\text{mAdc}$, $I_E=0$)	18	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu\text{Adc}$, $I_C=0$)	4.0	---	Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=20\text{Vdc}$, $I_E=0$)	---	0.1	μAdc
I_{CEO}	Collector Cutoff Current ($V_{CE}=15\text{Vdc}$, $I_B=0$)	---	0.1	μAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=3.0\text{Vdc}$, $I_C=0$)	---	0.1	μAdc

ON CHARACTERISTICS

h_{FE}	DC Current Gain ($I_C=1.0\text{mAdc}$, $V_{CE}=5.0\text{Vdc}$)	28	270	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=10\text{mAdc}$, $I_E=1.0\text{mAdc}$)	---	0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=10\text{mAdc}$, $I_E=1.0\text{mAdc}$)	---	1.4	Vdc

SMALL-SIGNAL CHARACTERISTICS

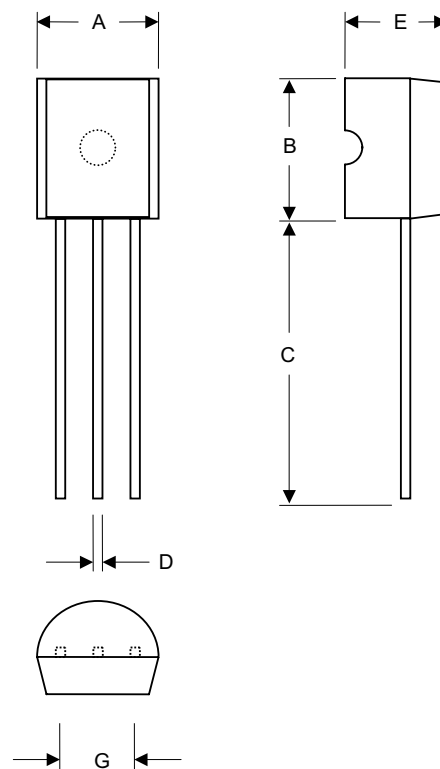
f_T	Transistor Frequency ($I_C=5.0\text{mAdc}$, $V_{CE}=5.0\text{Vdc}$, $f=400\text{MHz}$)	600	---	MHz
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CLASSIFICATION OF h_{FE}

Rank	G	H	I
Range	70-108	97-146	130-198

NPN Silicon Transistors

TO-92



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	

Ordering Information :

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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