Micro Commercial Components
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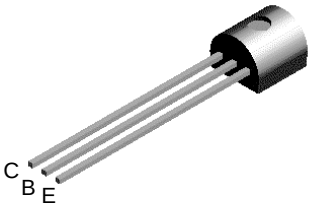
S9018

NPN Silicon Transistors

Features

- TO-92 Plastic-Encapsulate Transistors
- Capable of 0.31Watts(Tamb=25°C) of Power Dissipation.
- Collector-current 0.05A
- Collector-base Voltage 25V
- Operating and storage junction temperature range: -55°C to +150°C
- Marking Code: S9018



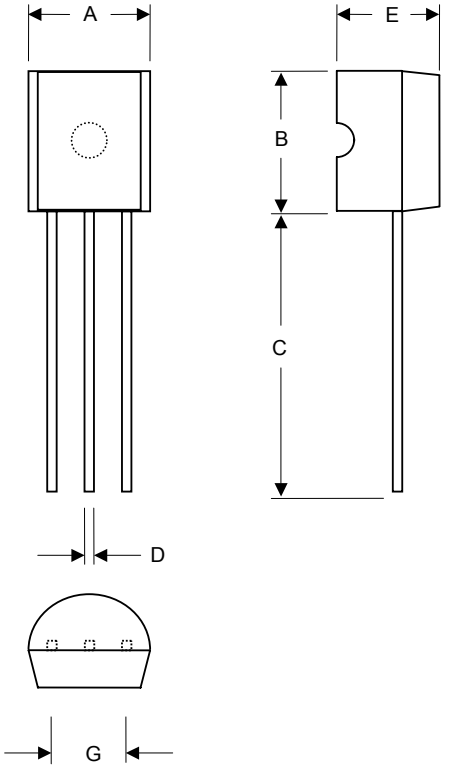
Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage (I_C=100uAdc, I_E=0)	25	---	Vdc
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I_C=0.1mAdc, I_B=0)	18	---	Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I_E=100uAdc, I_C=0)	4.0	---	Vdc
I_{CBO}	Collector Cutoff Current (V_{CB}=20Vdc, I_E=0)	---	0.1	uAdc
I_{CEO}	Collector Cutoff Current (V_{CE}=15Vdc, I_B=0)	---	0.1	uAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=3.0Vdc, I_C=0)	---	0.1	uAdc
ON CHARACTERISTICS				
h_{FE}	DC Current Gain (I_C=1.0mAdc, V_{CE}=5.0Vdc)	28	270	---
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage (I_C=10mAdc, I_B=1.0mAdc)	---	0.5	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage (I_C=10mAdc, I_B=1.0mAdc)	---	1.4	Vdc
SMALL-SIGNAL CHARACTERISTICS				
f_T	Transistor Frequency (I_C=5.0mAdc, V_{CE}=5.0Vdc, f=400MHz)	600	---	MHz

CLASSIFICATION OF $H_{FE(1)}$

Rank	F	G	H	I	J
Range	54-80	72-108	97-146	132-198	180-270

TO-92



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.175	.185	4.45	4.70	
B	.175	.185	4.46	4.70	
C	.500	---	12.7	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	