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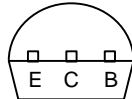
2SC1815

Features

- 2SC1815 is NPN Silicon Epitaxial Transistor Designed for RF, AF Amplifier and General Purpose Applications.
- Capable of 0.4Watts of Power Dissipation.
- Collector-current 0.15A
- Collector-base Voltage 60V
- Marking Code: C1815

NPN Silicon Epitaxial Transistor

Pin Configuration
Bottom View



Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
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OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ($I_C=0.1mA$, $I_B=0$)	50		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A$, $I_E=0$)	60		Vdc
V_{BEF}	Emitter-Base Voltage ($I_E=310mA$)	1.45		Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=60Vdc$, $I_E=0A$)		0.1	μA
I_{CEO}	Collector Cutoff Current ($V_{CB}=50Vdc$, $I_E=0A$)		0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0Vdc$, $I_C=0A$)		0.1	μA

ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain* ($I_C=2.0mA$, $V_{CE}=6.0Vdc$)	70	700	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$)		0.25	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$)		1.0	Vdc
V_{BE}	Base-Emitter Voltage ($I_E=310mA$)	---	1.45	Vdc

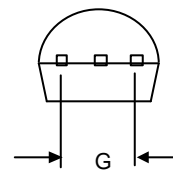
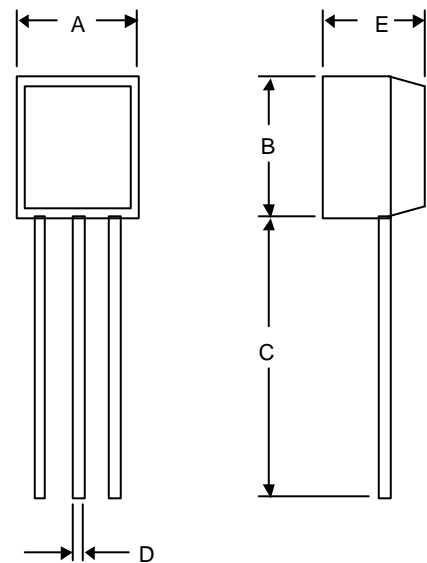
SMALL-SIGNAL CHARACTERISTICS

f_T	Transistor Frequency ($I_C=1.0mA$, $V_{CE}=10Vdc$, $f=30MHz$)	80		MHz
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CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700

TO-92



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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	