



Micro Commercial Components

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**2SC1815-O**  
**2SC1815-Y**  
**2SC1815-GR**  
**2SC1815-BL**

## 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 : C1815
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL rating 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates Compliant. See ordering information)

## NPN Silicon Epitaxial Transistor

### 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	$\mu A$
$I_{CEO}$	Collector Cutoff Current ( $V_{CB}=50Vdc$ , $I_E=0A$ )		0.1	$\mu A$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=5.0Vdc$ , $I_C=0A$ )		0.1	$\mu A$

#### 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

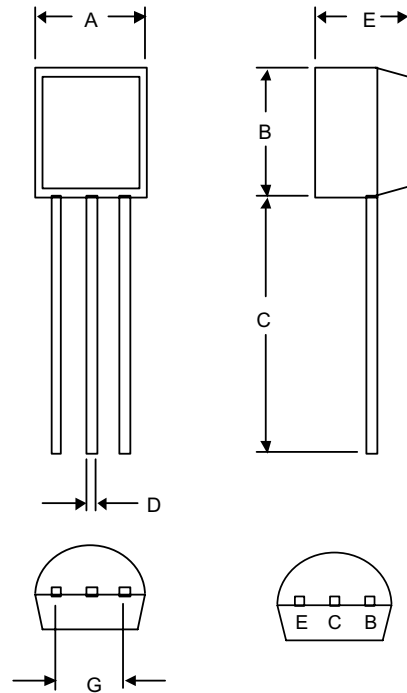
#### SMALL-SIGNAL CHARACTERISTICS

$f_T$	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



DIM	DIMENSIONS				NOTE
	INCHES		MM		
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	.010	.104	2.44	2.64	

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## Ordering Information

Device	Packing
(Part Number)-AP	Ammo Packing;2Kpcs/AmmoBox
(Part Number)-BP	Bulk;1Kpcs/Bag

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