



**2SC1008-R**  
**2SC1008-O**  
**2SC1008-Y**  
**2SC1008-G**

## Features

- 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
- General Purpose Switching and Amplification
- Capable of 0.8Watts of Power Dissipation.
- Collector-current 0.7A
- Collector-base Voltage 80V
- Marking : C1008
- Halogen free available upon request by adding suffix "-HF"

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
<b>OFF CHARACTERISTICS</b>				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage* ( $I_C=10\text{mAdc}$ , $I_B=0$ )	60		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\text{uAdc}$ , $I_E=0$ )	80		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=10\text{uAdc}$ , $I_C=0$ )	8		Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=60\text{Vdc}$ , $I_E=0\text{Adc}$ )		0.1	$\mu\text{Adc}$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=5.0\text{Vdc}$ , $I_C=0\text{Adc}$ )		0.1	$\mu\text{Adc}$

## ON CHARACTERISTICS

$h_{FE}$	DC Current Gain* ( $I_C=50\text{mAdc}$ , $V_{CE}=2.0\text{Vdc}$ )	40	400	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=500\text{mAdc}$ , $I_B=50\text{mAdc}$ )		0.4	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_C=500\text{mAdc}$ , $I_B=50\text{mAdc}$ )		1.1	Vdc
$C_{ob}$	Collector Output Capacitance ( $V_{CB}=10\text{Vdc}$ , $I_C=0$ , $f=1\text{MHz}$ )		Typ 8	pF

## SMALL-SIGNAL CHARACTERISTICS

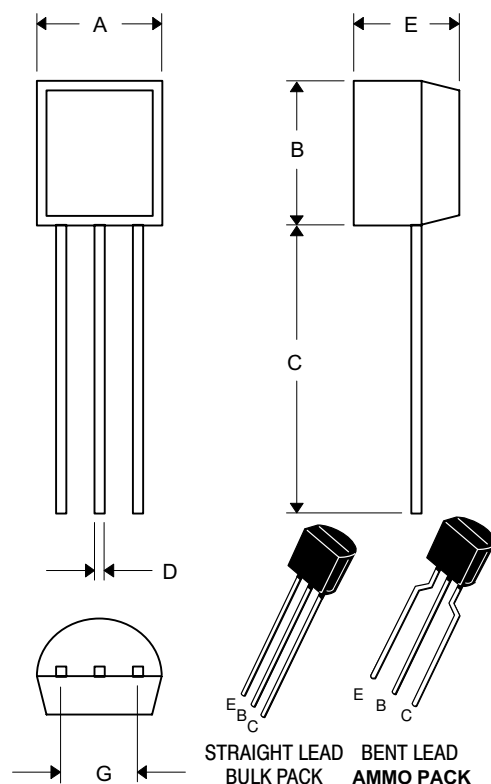
$f_T$	Transistor Frequency ( $I_C=50\text{mAdc}$ , $V_{CE}=10\text{Vdc}$ )	30		MHz
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## CLASSIFICATION OF $h_{FE(1)}$

Rank	R	O	Y	G
Range	40-80	70-140	120-240	200-400

## NPN Silicon Epitaxial Transistor

### TO-92



STRAIGHT LEAD BULK PACK  
BENT LEAD AMMO PACK

### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	---	12.70	---	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	Straight Lead Bent Lead
	.173	.220	4.40	5.60	

\* 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: 100Kpcs/Carton

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

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