



# THE DATASHEET OF 2SC945-GR-AP





Micro Commercial Components



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# 2SC945-Y 2SC945-GR

## Features

- Capable of 0.4Watts of Power Dissipation.
- Collector-current 0.15A
- Collector-base Voltage 60V
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

## 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 ( $I_C=0.1mA_{dc}, I_B=0$ )	50		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ( $I_C=100\mu A_{dc}, I_E=0$ )	60		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ( $I_E=100\mu A_{dc}, I_C=0$ )	5.0		Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=60V_{dc}, I_E=0A_{dc}$ )		0.1	$\mu A_{dc}$
$I_{CER}$	Collector Cutoff Current ( $V_{CE}=55V_{dc}, R=10M\Omega$ )		0.1	$\mu A_{dc}$
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=5.0V_{dc}, I_C=0A_{dc}$ )		0.1	$\mu A_{dc}$

### ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain ( $I_C=1.0mA_{dc}, V_{CE}=6.0V_{dc}$ )	120	400	
$h_{FE(2)}$	DC Current Gain ( $I_C=0.1mA_{dc}, V_{CE}=6.0V_{dc}$ )	40		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ( $I_C=100mA_{dc}, I_B=10mA_{dc}$ )		0.3	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ( $I_C=100mA_{dc}, I_B=10mA_{dc}$ )		1.0	Vdc
$V_{BE}$	Base-Emitter Voltage ( $I_E=310mA_{dc}$ )		1.4	Vdc

### SMALL-SIGNAL CHARACTERISTICS

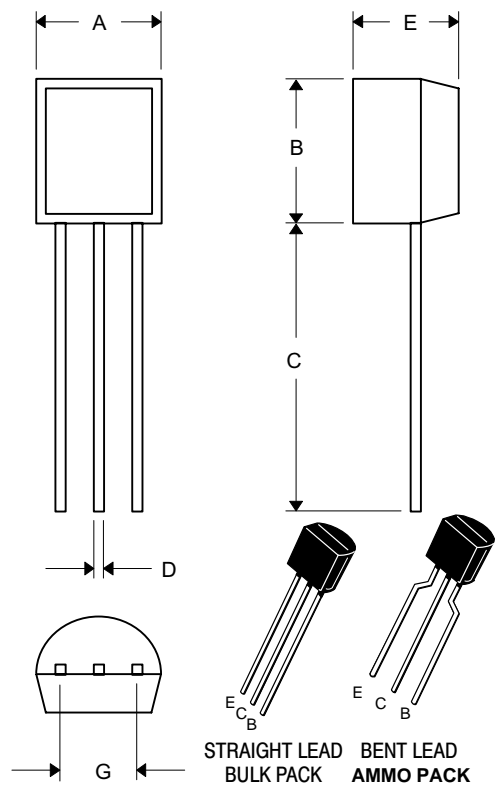
$f_T$	Transistor Frequency ( $I_C=10mA_{dc}, V_{CE}=6.0V_{dc}, f=30MHz$ )	150		MHz
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### CLASSIFICATION OF $h_{FE(1)}$

Rank	Y	GR
Range	120-240	200-400

## NPN Silicon Plastic-Encapsulate Transistor

### TO-92



### 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
	.173	.220	4.40	5.60	Bent Lead

\* 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: 20Kpcs/Carton
Part Number-BP	Bulk: 100Kpcs/Carton

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

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