



Micro Commercial Components



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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 ($I_C=0.1mA$, $I_B=0$)	50		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=1000\mu A$, $I_E=0$)	60		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu A$, $I_C=0$)	5.0		Vdc
I_{CBO}	Collector Cutoff Current ($V_{CB}=60Vdc$, $I_E=0A$)		0.1	μA
I_{CER}	Collector Cutoff Current ($V_{CE}=55Vdc$, $R=10M\Omega$)		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 ($I_C=1.0mA$, $V_{CE}=6.0Vdc$)	120	400	
$h_{FE(2)}$	DC Current Gain ($I_C=0.1mA$, $V_{CE}=6.0Vdc$)	40		
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$)		0.3	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage ($I_C=100mA$, $I_B=10mA$)		1.0	Vdc
V_{BE}	Base-Emitter Voltage ($I_E=310mA$)		1.4	Vdc

SMALL-SIGNAL CHARACTERISTICS

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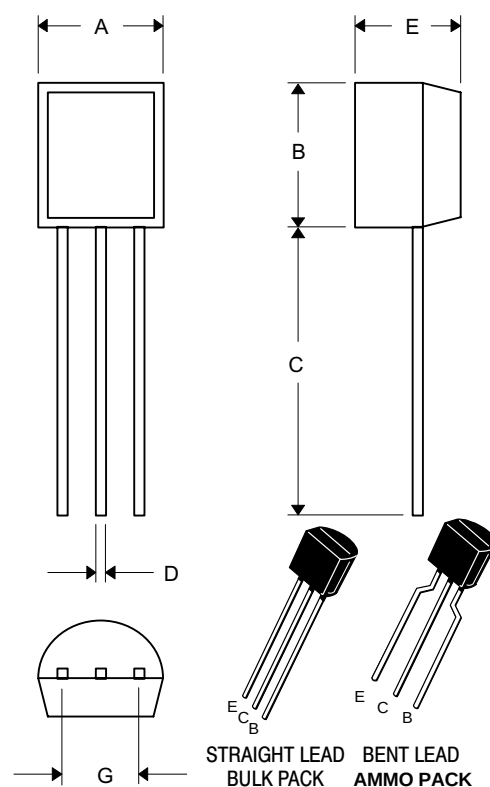
CLASSIFICATION OF $h_{FE(1)}$

Rank	Y	GR
Range	120-240	200-400

2SC945-Y
2SC945-GR

NPN Silicon
Plastic-Encapsulate
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
	.173	.220	4.40	5.60	Bent Lead

* For ammo packing detailed specification, click here to visit our website of product packaging for details.

www.mccsemi.com

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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