



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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2SB647(A)-B 2SB647(A)-C 2SB647-D

# **Features**

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Capable of 0.9Watts of Power Dissipation.
- Collector-current -1.0A
- Collector-base Voltage 120V
- Operating and storage junction temperature range: -55°C to +150°C
- Halogen free available upon request by adding suffix "-HF"
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)

  Electrical Characteristics @ 25°C Unless Otherwise Specified

I	Symbol	Parameter	Min	Max	Units	

### **OFF CHARACTERISTICS**

2SB647	Collector-Emitter Breakdown Voltage	- 80		Vdc
V <sub>(BR)CEO</sub> 2SB647A	(⊱= -1mAdc, l <sub>B</sub> =0)	- 100		Vdc
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage			Vdc
	$(I_c = -10uAdc, I_E = 0)$			
$V_{(BR)EBO}$	Emitter-Base Voltage			Vdc
	( = -10uAdc, = 0)			
I <sub>CBO</sub>	I <sub>CBO</sub> Collector Cutoff Current		-10	uAdc
	(V <sub>CB</sub> =-100Vdc, I <sub>E</sub> =0)			

### **ON CHARACTERISTICS**

h <sub>FE</sub>	h <sub>FE</sub> <sup>2SB647</sup> DC Current Gain		60	320	
	2SB647A ( $b = -150 \text{mAdc}, V_{CE} = -5 \text{Vdc}$ )		60	200	
V <sub>CE(sat)</sub> Collector-Emitter Saturation Voltage					
		(├= -500mAdc, ├= -50mAdc)		-1	Vdc

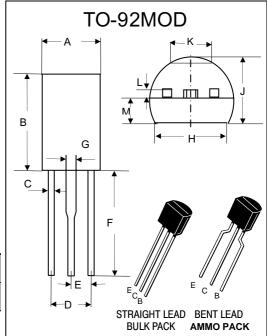
### **SMALL-SIGNAL CHARACTERISTICS**

f⊤	Transistor Frequency (b=-150mAdc, Vc=-5Vdc)			MHz
Cob	Output capacitance (I <sub>E</sub> = 0, V <sub>CE</sub> = -10Vdc, f=1 MHz)		20	рF

### **CLASSIFICATION OF H**FE (1)

Rank		В	С	D
Range	2SB647	60-120	100-200	160-320
range	2SB647A	60-120	100-200	

# **PNP Silicon** Plastic-Encapsulate **Transistor**

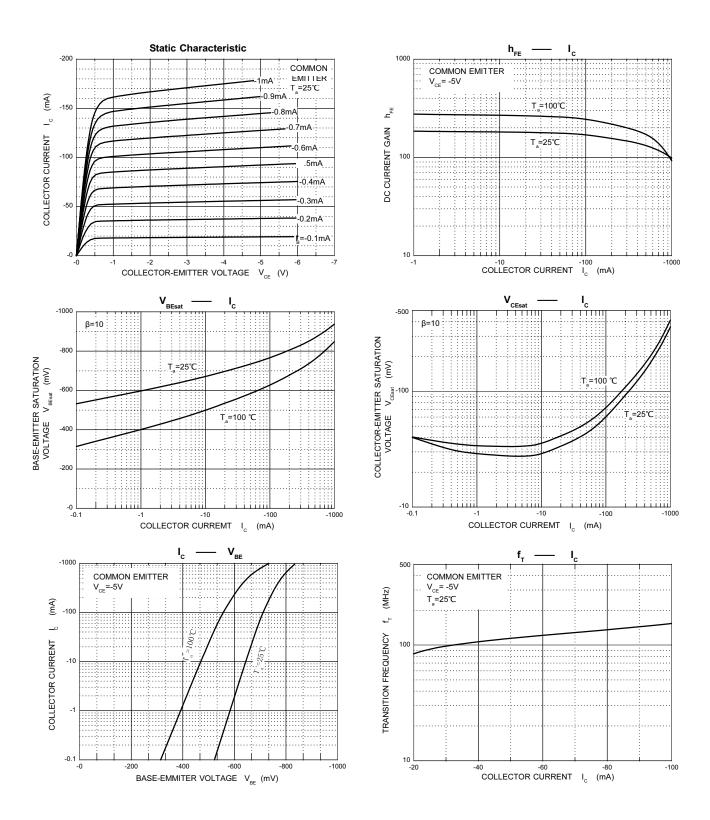


DIMENSIONS					
INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.228	.244	5.80	6.20	
В	.331	.346	8.40	8.80	
С	.016	.024	0.40	0.60	
D	.114	.122	2.90	3.10	Straight Lead
	.173	.220	4.40	5.60	Bent Lead
Е	.059		1.50		Straight Lead
	.086	.110	2.20	2.80	Bent Lead
F	.543	.559	13.80	14.20	
G	.035	.043	0.90	1.10	
Н	.157		4.00		
J	.185	.201	4.70	5.10	
K		.063		1.60	
L	.016	.020	0.40	0.50	
M	.068	.080	1.73	2.03	

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

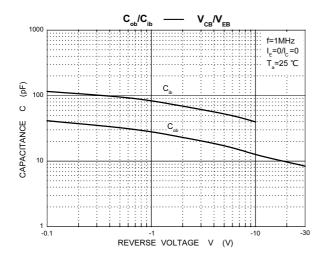


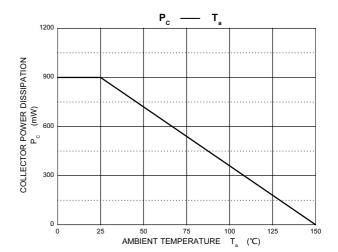
# 2SB647(A)





# 2SB647(A)







#### **Micro Commercial Components**

## Ordering Information:

Device	Packing
Part Number-AP	Ammo Packing: 20Kpcs/Carton
Part Number-BP	Bulk: 50Kpcs/Carton

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

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