

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 M28S-B M28S-C M28S-D

# **Features**

- Capable of 0.625Watts of Power Dissipation.
- Collector-current 1.0A
- Collector-base Voltage 40V
- Operating and storage junction temperature range: -55°C to +150°C
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Marking: M28S X

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Units
OFF CHARACTERISTICS				
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =1.0mAdc, I <sub>B</sub> =0)	20		Vdc
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I $_{\rm C}$ =0.1mAdc, I $_{\rm E}$ =0)	40		Vdc
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage (I $_{\rm E}$ =0.1mAdc, I $_{\rm C}$ =0)	6.0		Adc
I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =40Vdc, I <sub>E</sub> =0)		1.0	uAdc
I <sub>CEO</sub>	Collector Cutoff Current (V <sub>CE</sub> =20Vdc, E=0)		5.0	Vdc
l <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =5.0Vdc, b=0)		0.1	uAdc

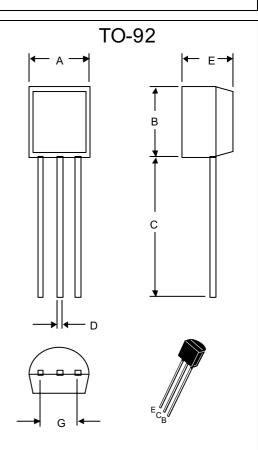
# **ON CHARACTERISTICS**

h <sub>FE-1</sub>	DC Current Gain (I <sub>C</sub> =1.0mAdc, V <sub>CE</sub> =1.0Vdc)	290	1000	
h <sub>FE-2</sub>	DC Current Gain (I <sub>c</sub> =100mAdc, V <sub>cE</sub> =1.0Vdc)	300	1000	
h <sub>FE-3</sub>	DC Current Gain (I <sub>C</sub> =300mAdc, V <sub>CE</sub> =1.0Vdc)	300	1000	
h <sub>FE-4</sub>	DC Current Gain (I <sub>C</sub> =500mAdc, V <sub>CE</sub> =1.0Vdc)	300	1000	
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage (I <sub>C</sub> =600mAdc, <sub>B</sub> =20mAdc)		0.55	Vdc
f <sub>T</sub>	Transition Frequency (V <sub>CE</sub> =10Vdc, I <sub>C</sub> =50mAdc, f=30MHz)	100		MHz

# CLASSIFICATION OF He

Rank	В	С	D
Range	300-550	500-700	650-1000

# NPN Silicon Plastic-Encapsulate Transistor



DIMENSIONS					
	INCHES		М	M	
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.170	.190	4.33	4.83	
В	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
Е	.130	.160	3.30	3.96	
G	.096	.104	2.44	2.64	



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# **Ordering Information:**

Device	Packing
Part Number-AP	Ammo Packing: 2Kpcs/Ammo Box
Part Number-BP	Bulk: 100Kpcs/Carton

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