

# M.C.C.

Micro Commercial Components



Micro Commercial Components  
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**2SC2712-O**  
**2SC2712-Y**  
**2SC2712-GR**  
**2SC2712-BL**

## Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Complementary to 2SA1162
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

## Maximum Ratings

Symbol	Rating	Rating	Unit
V <sub>CEO</sub>	Collector-Emitter Voltage	50	V
V <sub>CBO</sub>	Collector-Base Voltage	60	V
V <sub>EBO</sub>	Emitter-Base Voltage	5.0	V
I <sub>C</sub>	Collector Current	150	mA
P <sub>C</sub>	Collector power dissipation	150	mW
T <sub>J</sub>	Junction Temperature	-55 to +150	°C
T <sub>STG</sub>	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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### OFF CHARACTERISTICS

I <sub>CBO</sub>	Collector Cutoff Current (V <sub>CB</sub> =60Vdc, I <sub>E</sub> =0)	---	---	0.1	μA
I <sub>EBO</sub>	Emitter Cutoff Current (V <sub>EB</sub> =5.0Vdc, I <sub>C</sub> =0)	---	---	0.1	μA

### ON CHARACTERISTICS

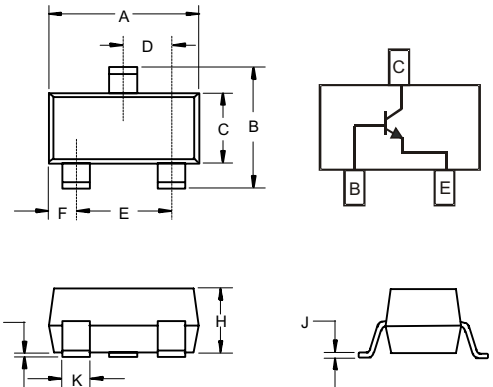
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage (I <sub>C</sub> =1mA, I <sub>B</sub> =0)	50	---	---	V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>C</sub> =100μA, I <sub>E</sub> =0)	60	---	---	V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage (I <sub>E</sub> =100μA, I <sub>C</sub> =0)	5.0	---	---	V
h <sub>F</sub>	DC Current Gain* (I <sub>C</sub> =2mAdc, V <sub>CE</sub> =6.0Vdc)	70	---	700	---
V <sub>CE(sat)</sub>	Collector Saturation Voltage* (I <sub>C</sub> =100mAdc, I <sub>B</sub> =10mAdc)	---	0.1	0.25	V
C <sub>ob</sub>	Output Capacitance (V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1MHz)	---	2.0	3.5	pF
f <sub>T</sub>	Gain Bandwidth product (V <sub>CE</sub> =10Vdc, I <sub>C</sub> =1mAdc)	80	---	---	MHz
NF	Noise Figure (V <sub>CE</sub> =6V, I <sub>C</sub> =0.1mA, f=1KHz, R <sub>g</sub> =10KΩ)	---	1.0	10	dB

### CLASSIFICATION OF h<sub>FE</sub>

Rank	O	Y	GR	BL
Range	70-140	120-240	200-400	350-700
Marking	LO	LY	LG	LL

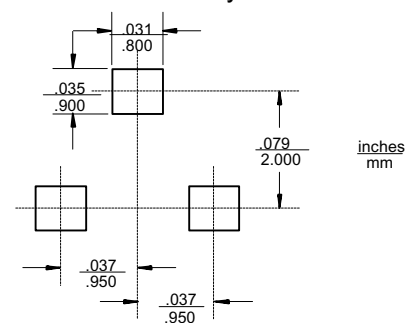
## NPN Plastic-Encapsulate Transistors

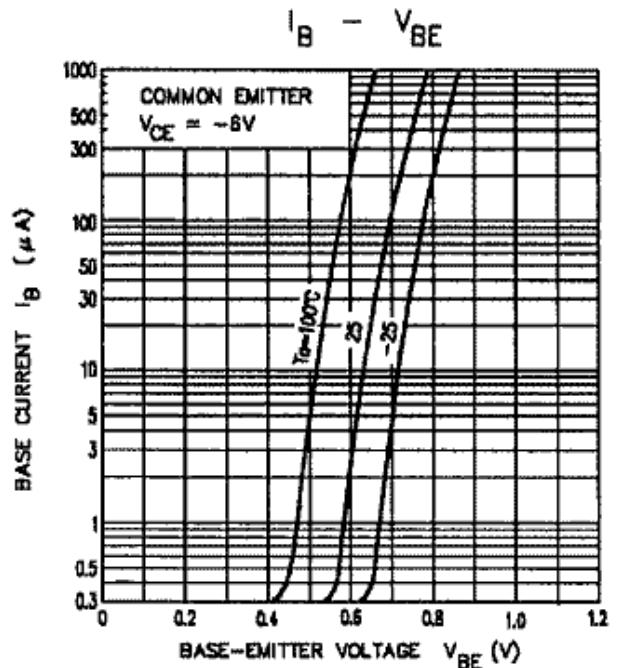
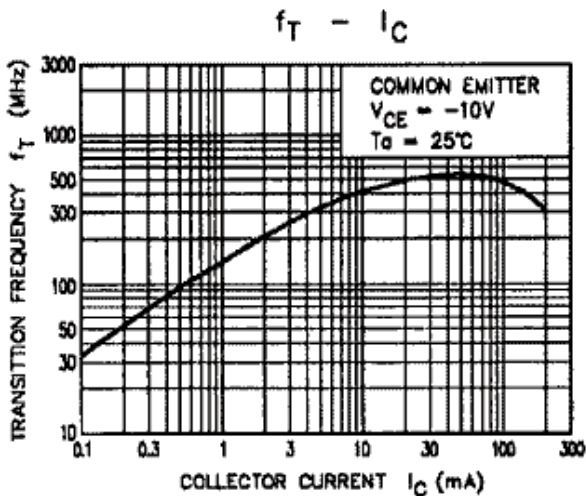
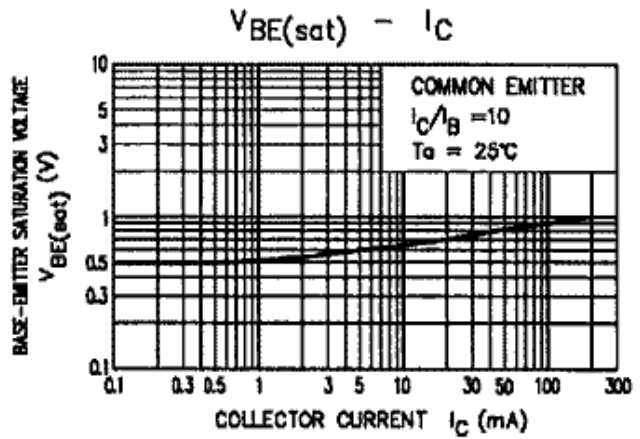
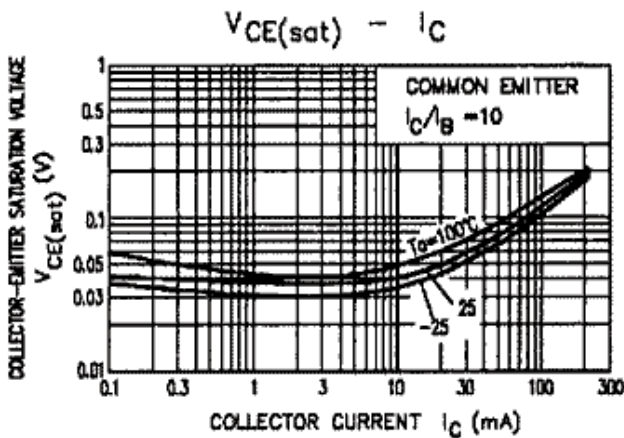
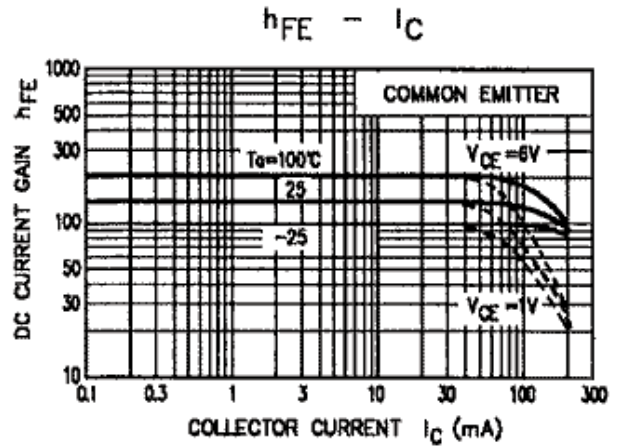
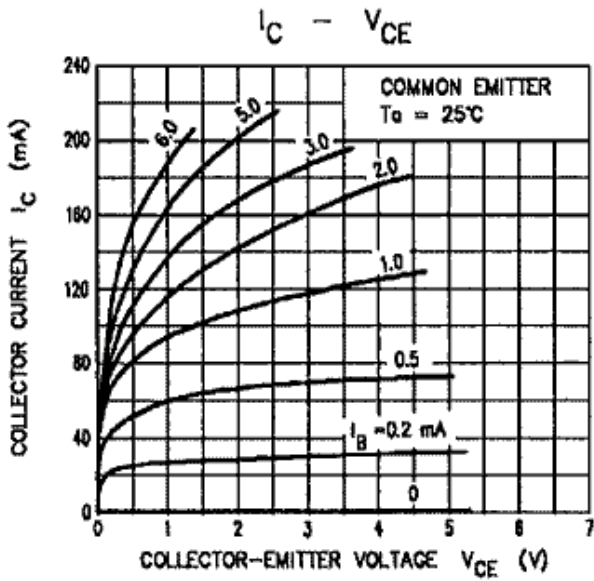
### SOT-23



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

### Suggested Solder Pad Layout







TM

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## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

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