

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
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	50	V
V_{CBO}	Collector-Base Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5.0	V
I_C	Collector Current	150	mA
P_C	Collector power dissipation	150	mW
T_J	Junction Temperature	-55 to +150	°C
T_{STG}	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_{CBO}	Collector Cutoff Current ($V_{CB}=60V_{dc}, I_E=0$)	---	---	0.1	μA
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0V_{dc}, I_C=0$)	---	---	0.1	μA

ON CHARACTERISTICS

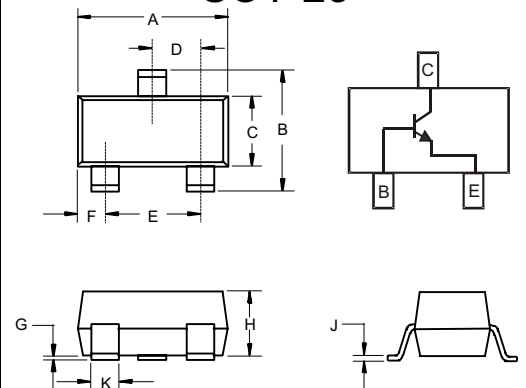
$V_{(BR)CEO}$	Collector-Emitter Breakdown Voltage ($I_C=1mA, I_B=0$)	50	---	---	V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_C=100\mu A, I_E=0$)	60	---	---	V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_E=100\mu A, I_C=0$)	5.0	---	---	V
h_F	DC Current Gain* ($I_C=2mA_{dc}, V_{CE}=6.0V_{dc}$)	70	---	700	---
$V_{CE(sat)}$	Collector Saturation Voltage* ($I_C=100mA_{dc}, I_B=10mA_{dc}$)	---	0.1	0.25	V
C_{ob}	Output Capacitance ($V_{CB}=10V, I_E=0, f=1MHz$)	---	2.0	3.5	pF
f_T	Gain Bandwidth product ($V_{CE}=10V_{dc}, I_C=1mA_{dc}$)	80	---	---	MHz
NF	Noise Figure ($V_{CE}=6V, I_C=0.1mA, f=1KHz, R_g=10K\Omega$)	---	1.0	10	dB

CLASSIFICATION OF h_{FE}

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

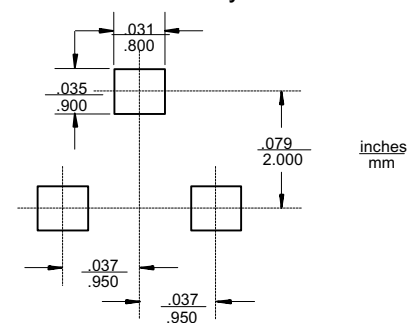
NPN Plastic-Encapsulate Transistors

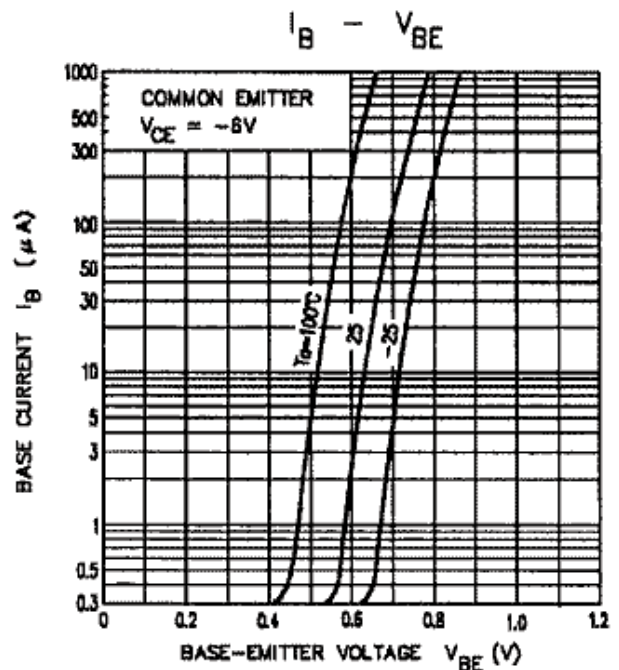
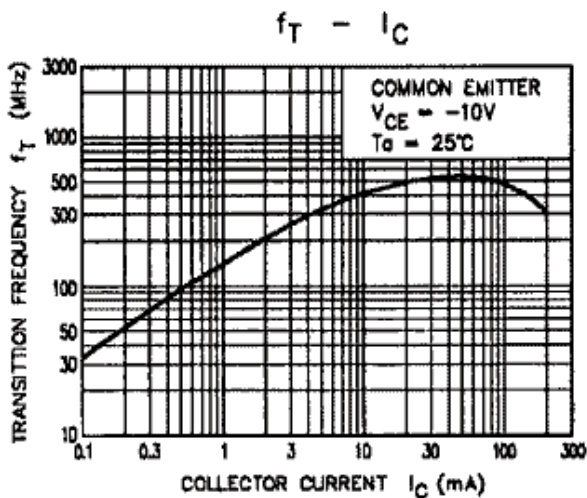
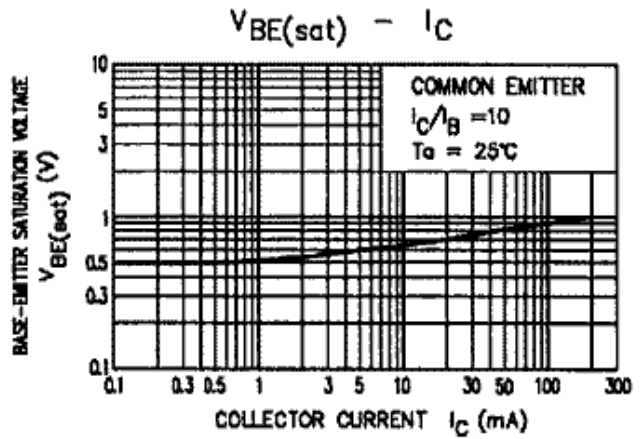
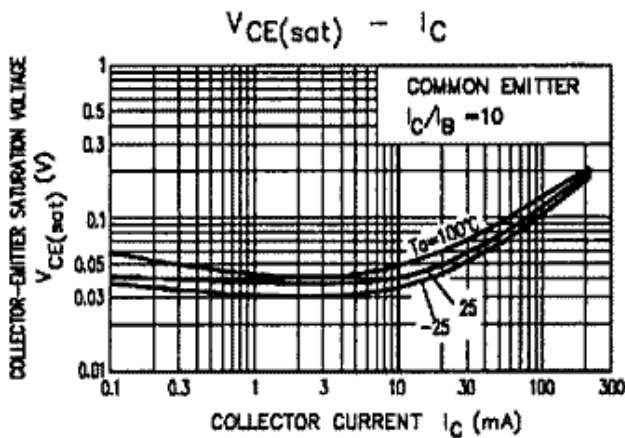
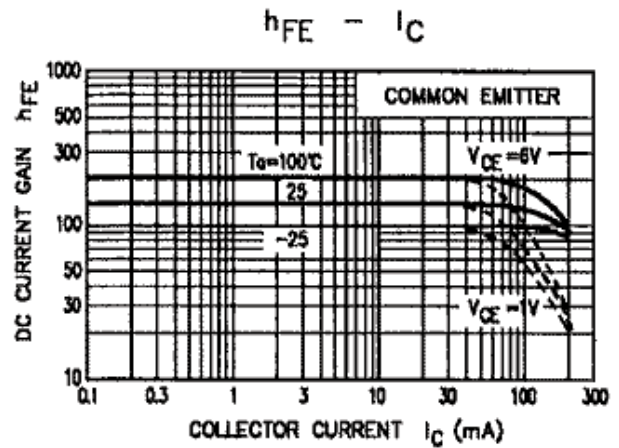
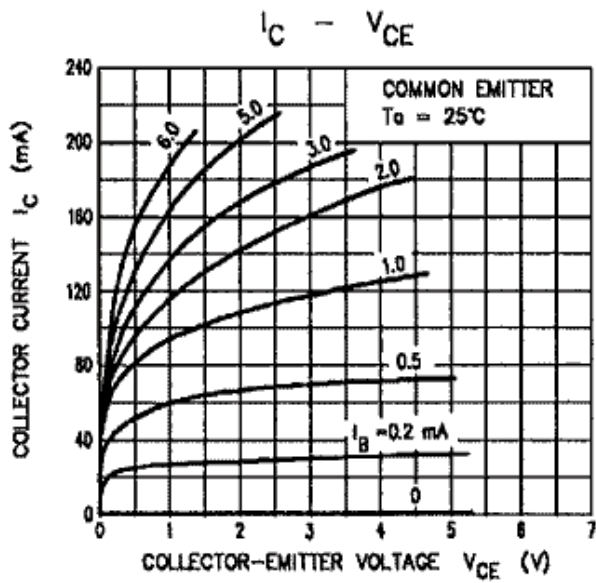
SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	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





Ordering Information :

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

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

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