



2SC4116-O
2SC4116-Y
2SC4116-GR
2SC4116-BL

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- High voltage and high current
- Complementary to 2SA1586
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	60	V
V_{CBO}	Collector-Base Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current	150	mA
P_C	Collector power dissipation	100	mW
T_J	Junction Temperature	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 ($V_{CB}=60Vdc$)	---	---	100	nAdc
I_{EBO}	Emitter Cutoff Current ($V_{EB}=5.0Vdc$)	---	---	100	nAdc

ON CHARACTERISTICS

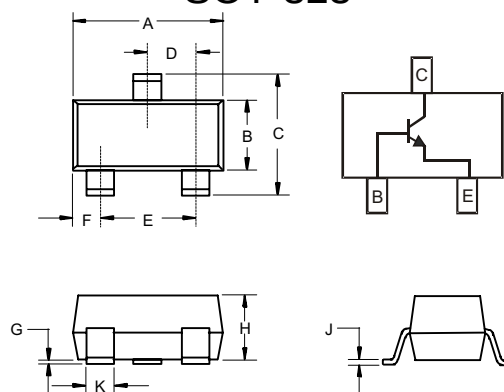
BV_{CBO}	Collector-base breakdown voltage ($I_C=100\mu Adc$)	60	---	---	Vdc
BV_{CEO}	Collector-emitter breakdown voltage ($I_C=1mA$)	50	---	---	Vdc
BV_{EBO}	Emitter-base breakdown voltage ($I_E=100\mu Adc$)	5	---	---	Vdc
h_{FE}	DC Current Gain ($I_C=1mA$, $V_{CE}=6.0Vdc$)	70	---	700	---
$V_{CE(sat)}$	Collector Saturation Voltage ($I_C=50mA$, $I_B=5.0mA$)	---	---	0.25	Vdc
C_{ob}	Output Capacitance ($V_{CB}=10.0Vdc$, $I_E=0$, $f=1.0MHz$)	---	---	3.5	pF
f_T	Gain Bandwidth product ($V_{CE}=10Vdc$, $I_E=1mA$)	---	80	---	MHz

h_{FE} CLASSIFICATION

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

NPN Plastic-Encapsulate Transistors

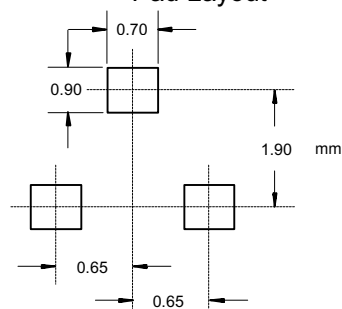
SOT-323



DIMENSIONS

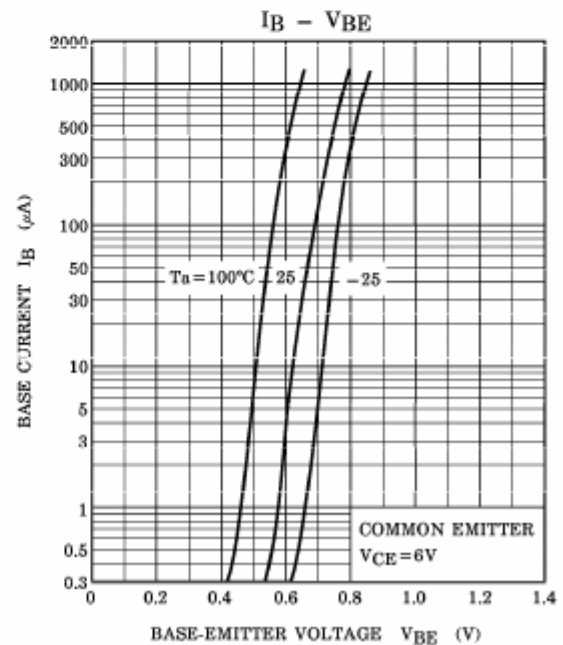
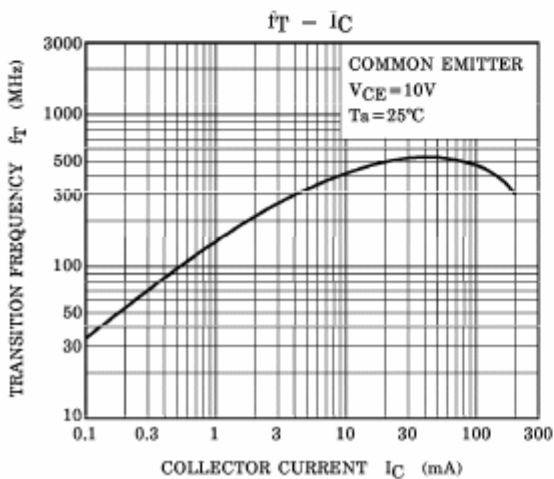
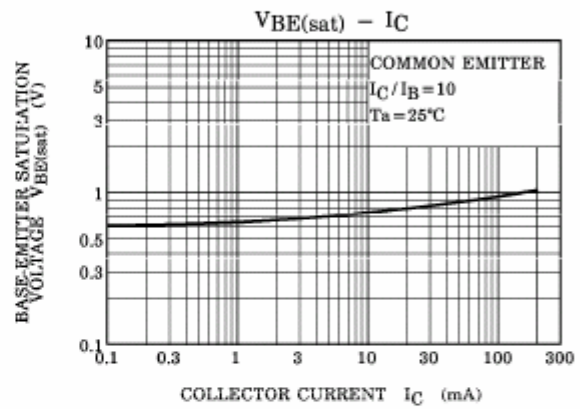
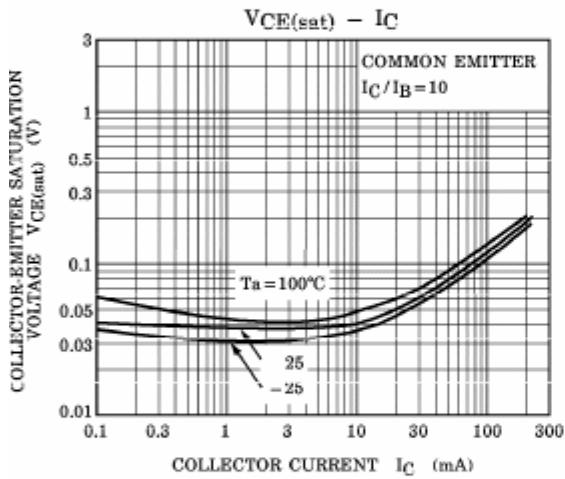
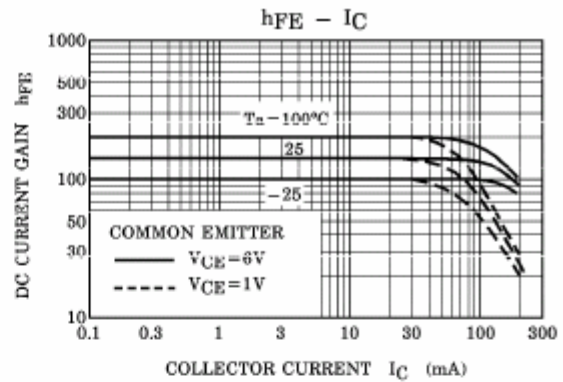
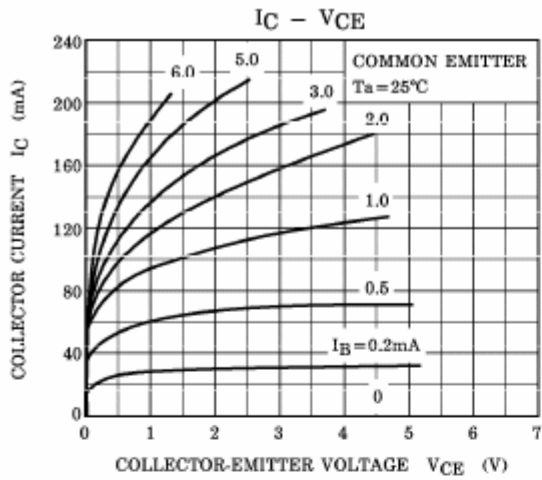
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

Suggested Solder Pad Layout



2SC4116

Typical Characteristics

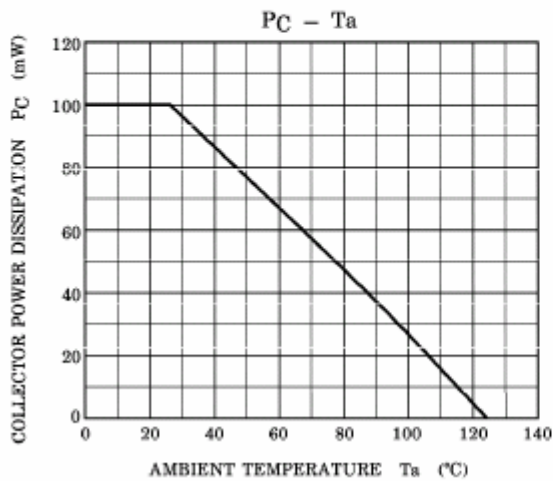
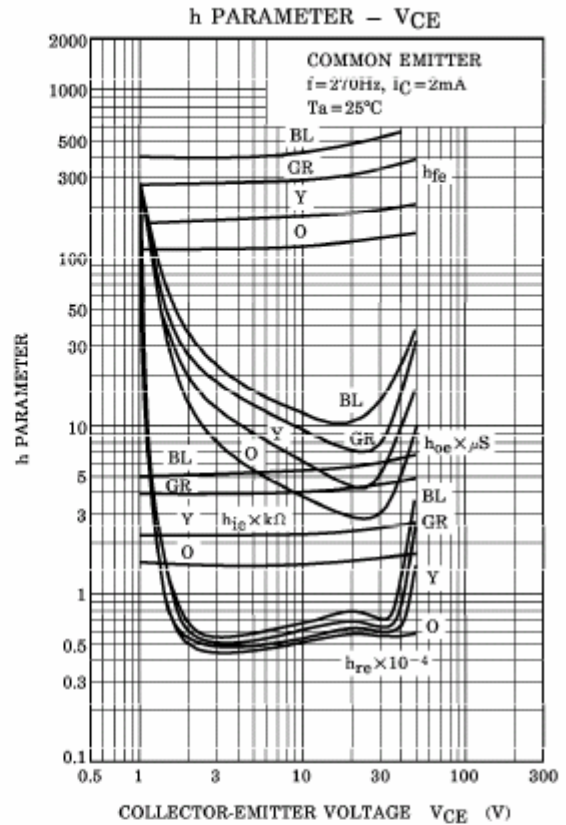
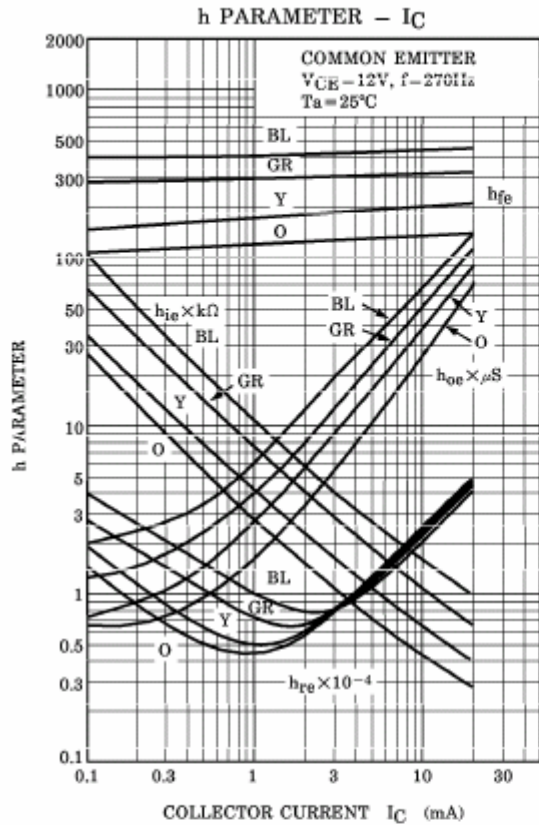


2SC4116

Typical Characteristics

MCC

Micro Commercial Components



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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