



Micro Commercial Components

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 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

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

## Features

- Low noise
- High voltage and high current
- Complementary to 2SA1586
- Case Material: Molded Plastic. UL Flammability Classification Rating 94-0 and MSL Rating 1

## 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

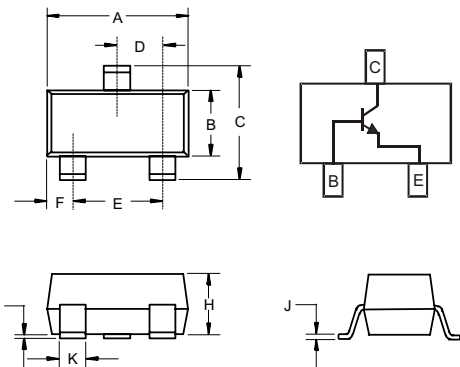
$BV_{CBO}$	Collector-base breakdown voltage ( $I_C = 100\mu Adc$ )	60	---	---	Vdc
$BV_{CEO}$	Collector-emitter breakdown voltage ( $I_C = 1mAdc$ )	50	---	---	Vdc
$BV_{EBO}$	Emitter-base breakdown voltage ( $I_E = 100\mu Adc$ )	5	---	---	Vdc
$h_{FE}$	DC Current Gain ( $I_C = -1mAdc, V_{CE} = -6.0Vdc$ )	70	---	700	---
$V_{CE(sat)}$	Collector Saturation Voltage ( $I_C = -50mAdc, I_B = -5.0mAdc$ )	---	---	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 ( $V_{CE} = 10Vdc, I_E = 1mAdc$ )	---	80	---	MHz

### $h_{FE}$ CLASSIFICATION

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

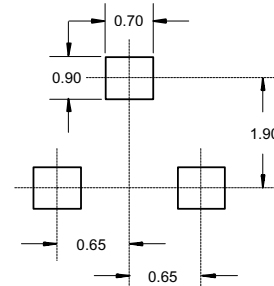
## NPN Plastic-Encapsulate Transistors

### SOT-323

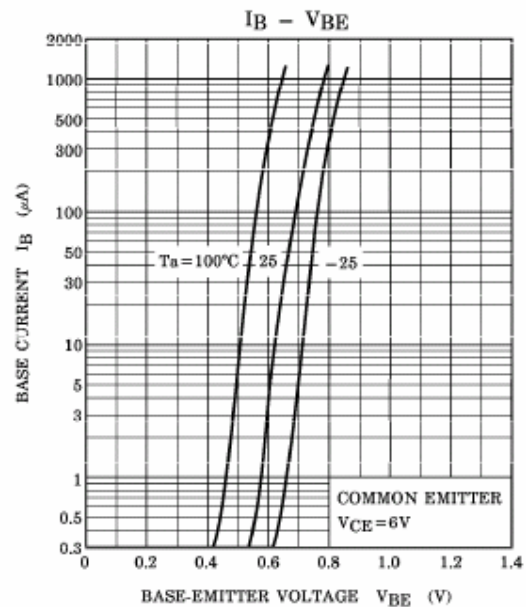
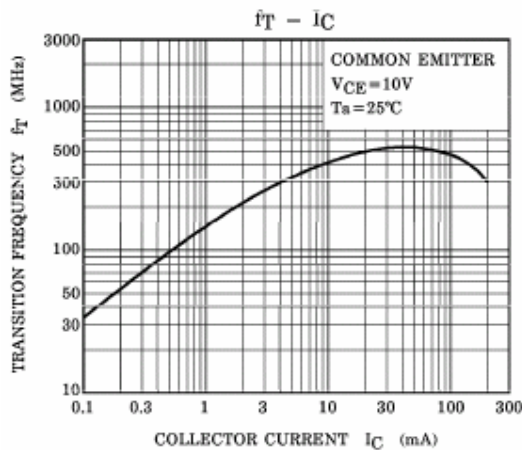
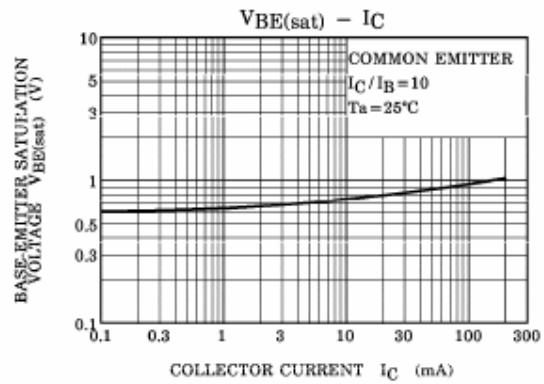
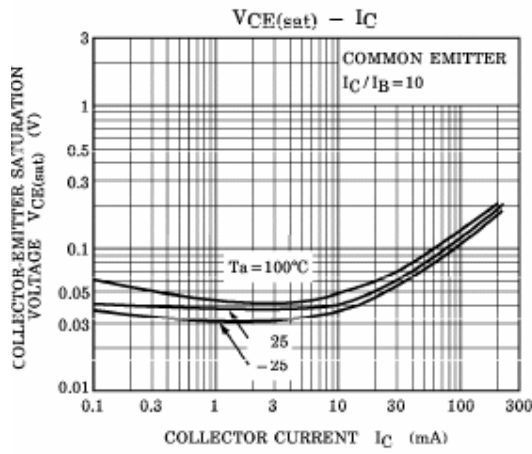
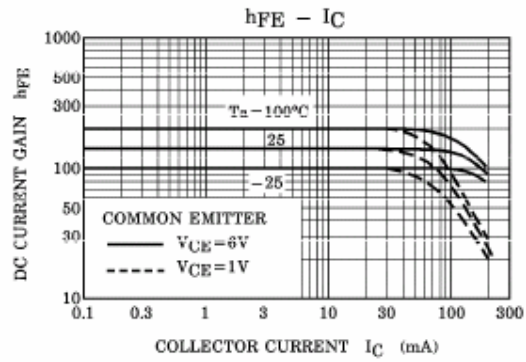
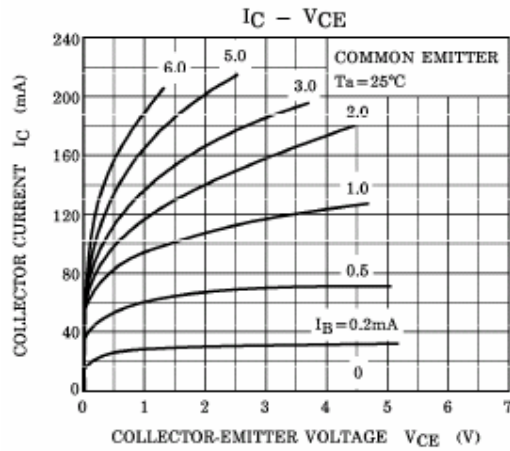


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

### Suggested Solder Pad Layout



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Typical Characteristics

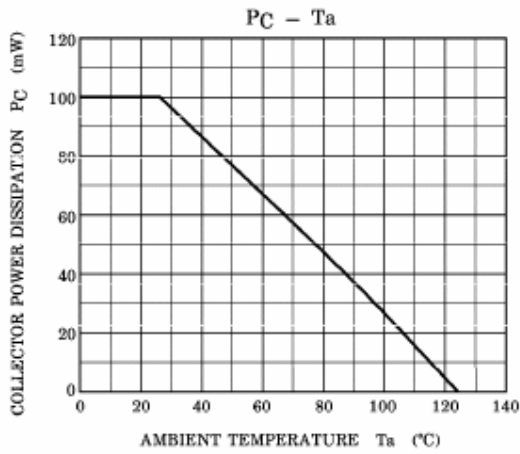
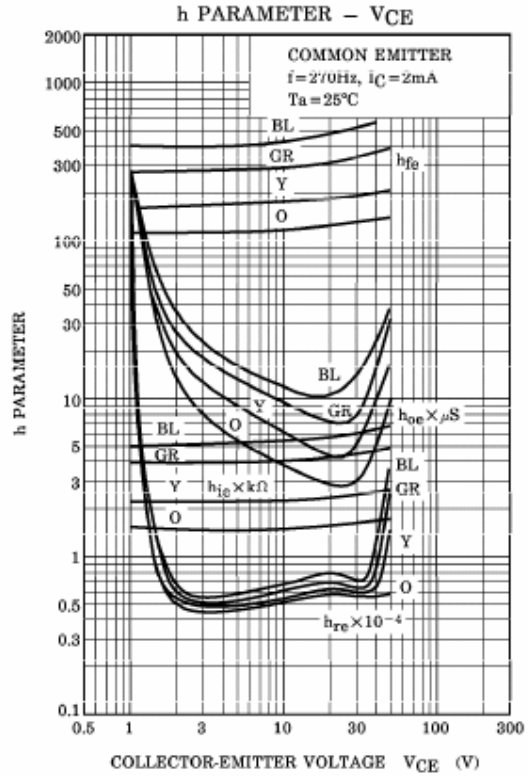
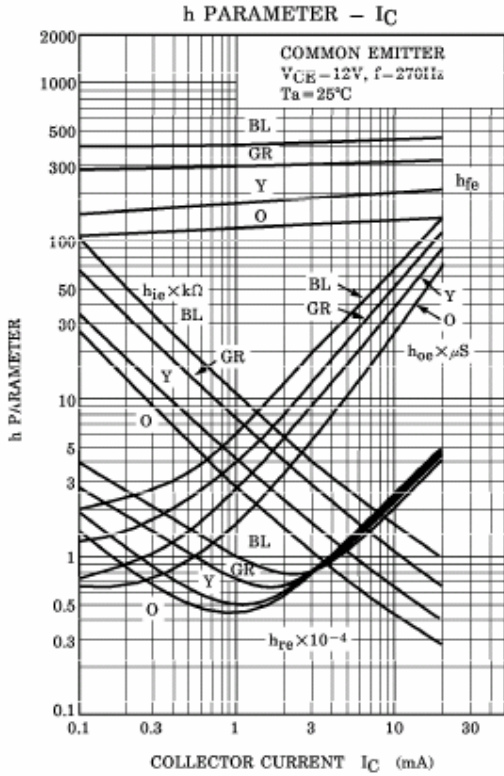


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Typical Characteristics



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## Ordering Information

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

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