



Micro Commercial Components



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2SC4215-R
2SC4215-O
2SC4215-Y

Features

- Halogen free available upon request by adding suffix "-HF"
- Small reverse transfer capacitance: $C_{re} = 0.55\text{pF}$ (typ.)
- Low Noise figure: $NF = 2\text{dB}$ (typ.) ($f = 100\text{MHz}$)
- 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

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	30	V
V_{CBO}	Collector-Base Voltage	40	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current	20	mA
P_C	Collector power dissipation	100	mW
T_J, T_{STG}	Junction and Storage Temperature	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics @ 25 $^{\circ}\text{C}$ Unless Otherwise Specified

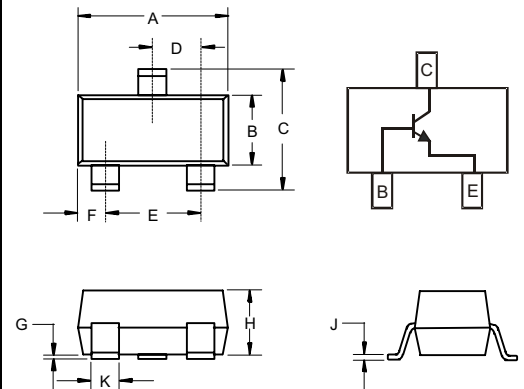
Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CBO}$	Collector -base breakdown voltage ($I_C = 100\mu\text{A}, I_E = 0$)	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage ($I_C = 1\text{mA}, I_B = 0$)	30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage ($I_E = 100\mu\text{A}, I_C = 0$)	4			V
I_{CBO}	Collector cut-off current ($V_{CB} = 40\text{V}, I_E = 0$)			0.1	μA
I_{EBO}	Emitter cut-off current ($V_{EB} = 4\text{V}, I_C = 0$)			0.5	μA
h_{FE}	DC Current Gain ($V_{CE} = 6\text{V}, I_C = 1\text{mA}$)	40		200	
$C_{c,rb}$	Collector-base time constant ($V_{CE} = 6\text{V}, I_C = 1\text{mA}, f = 30\text{MHz}$)			25	ps
C_{re}	Reverse transfer capacitance ($V_{CB} = 10\text{V}, f = 1.0\text{MHz}$)		0.55		pF
f_T	Transition frequency ($V_{CE} = 6\text{V}, I_C = 1\text{mA}$)	260	550		MHz

h_{FE} CLASSIFICATION

Rank	R	O	Y
Range	40-80	70-140	100-200
Marking	QR	QO	QY

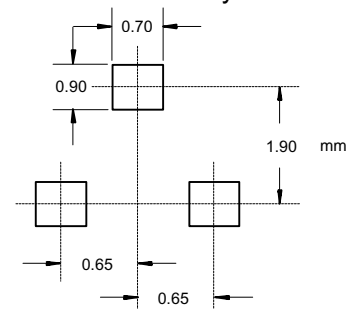
NPN Silicon Epitaxial Transistors

SOT-323

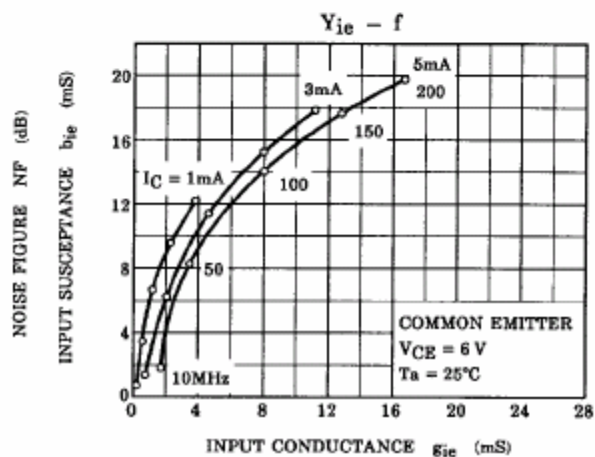
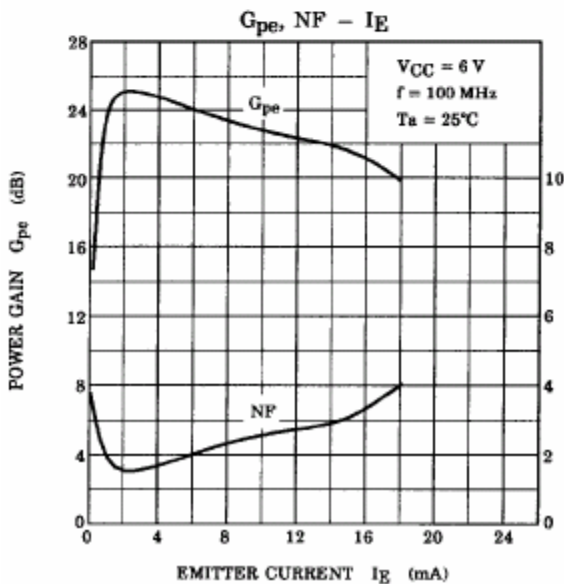
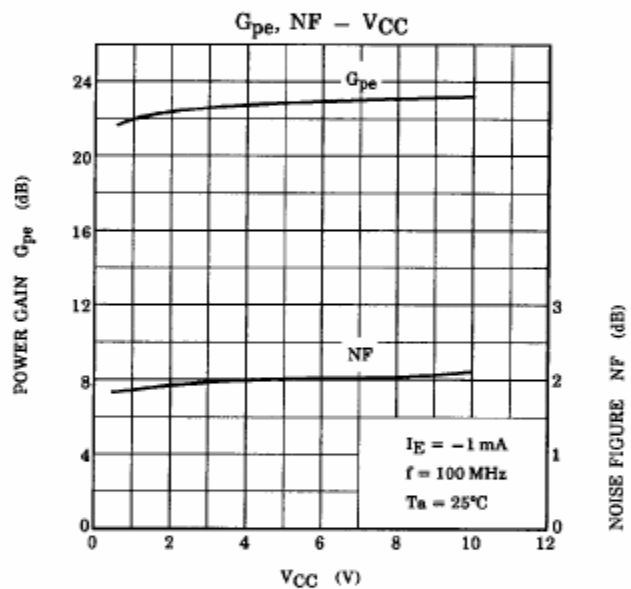
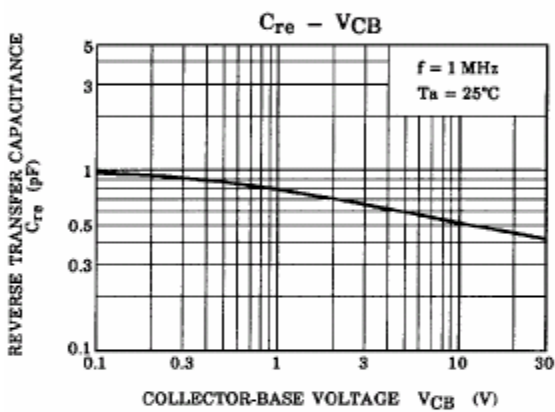
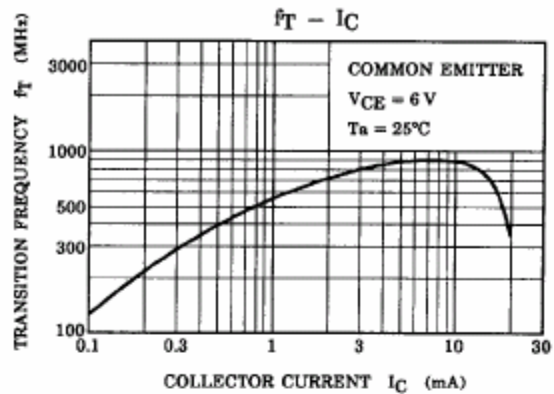
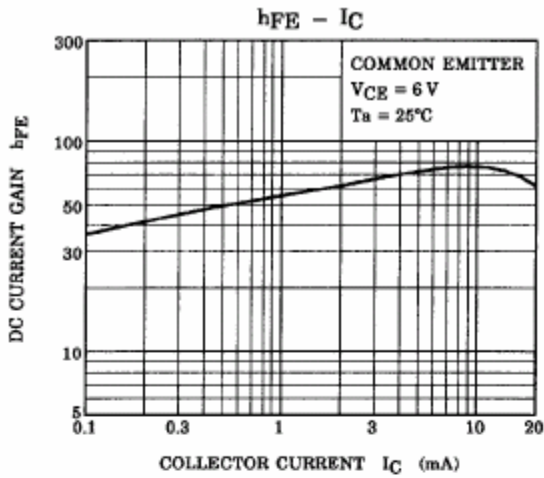


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

Suggested Solder Pad Layout



2SC4215





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Ordering Information :

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

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

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