



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

Features

- 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

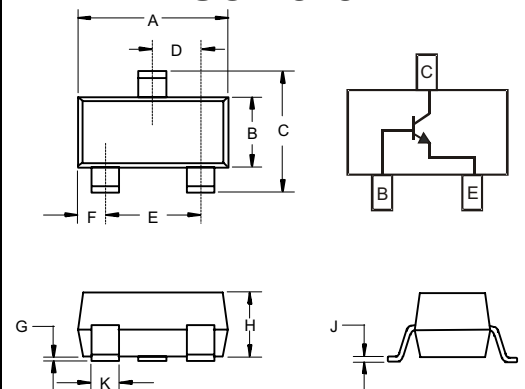
Symbol	Parameter	Min	Typ	Max	Units
$V_{(BR)CBO}$	Collector -base breakdown voltage ($I_C = 100\mu\text{A}, I_E = 0$)	40			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage ($I_C = 1\text{mA}, I_B = 0$)	30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage ($I_E = 100\mu\text{A}, I_C = 0$)	4			V
I_{CBO}	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_{Crb}	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

hFE CLASSIFICATION

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

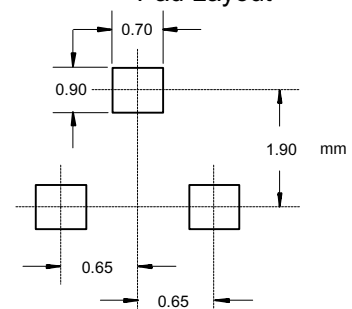
NPN Silicon Epitaxial Transistors

SOT-323

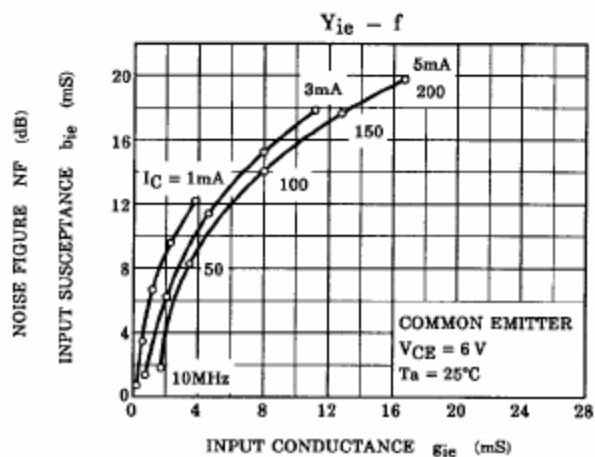
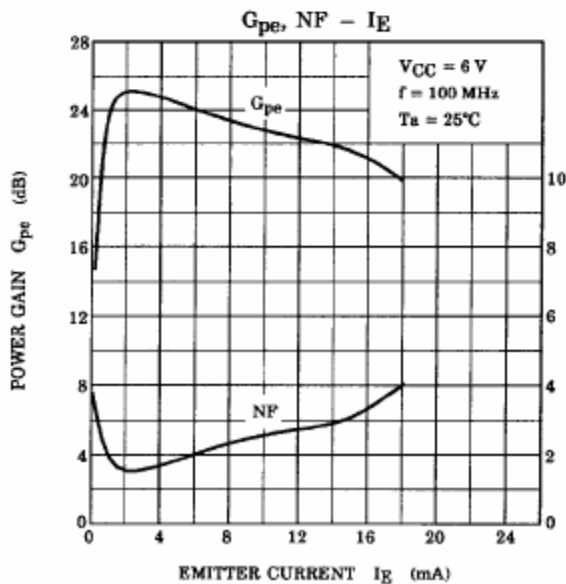
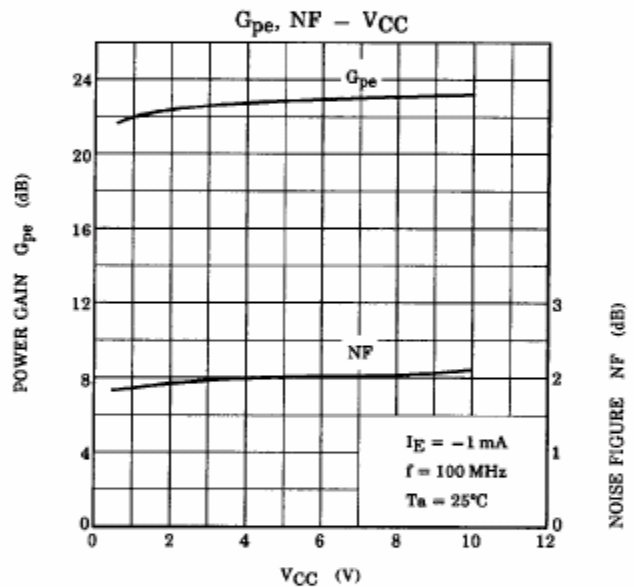
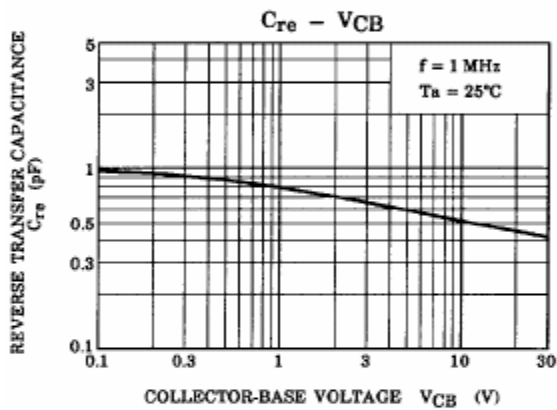
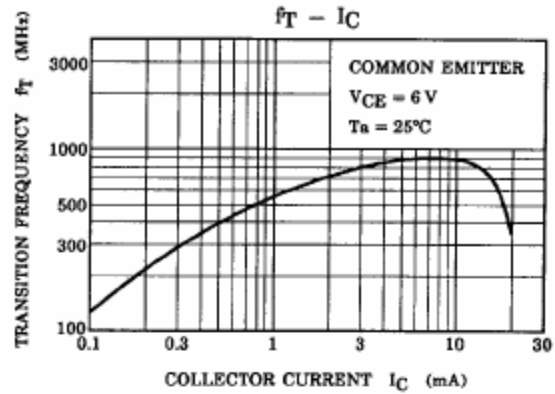
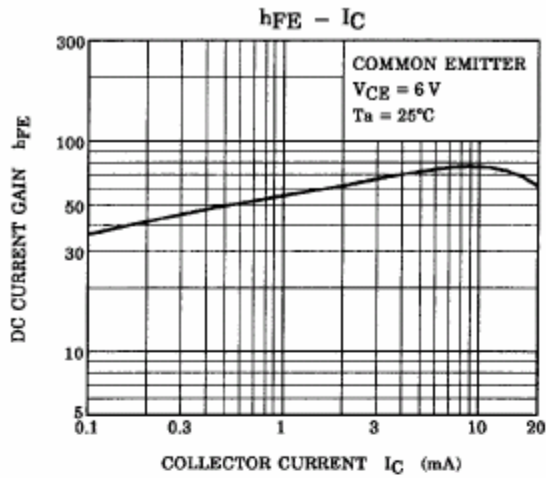


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.012	.016	.30	.40	

Suggested Solder Pad Layout



2SC4215





TM

Micro Commercial Components

Ordering Information :

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

www.mccsemi.com