

**Micro Commercial Components** 



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 Fax: (818) 701-4939 2SC4215-R 2SC4215-O 2SC4215-Y

# Features

- Halogen free available upon request by adding suffix "-HF"
- Small reverse transfer capacitance: Cre= 0.55pF(typ.)
- Low Voise figure: NF=2dB (typ.) (f=100 MHz)
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1

# **Maximum Ratings**

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	30	V
$V_{CBO}$	Collector-Base Voltage	40	V
V <sub>EBO</sub>	Emitter-Base Voltage	4	V
Ic	Collector Current	20	mA
Pc	Collector power dissipation	100	mW
$T_{J}$ , $T_{STG}$	Junction and Storage Temperature	-55 to +150	$^{\circ}\mathbb{C}$

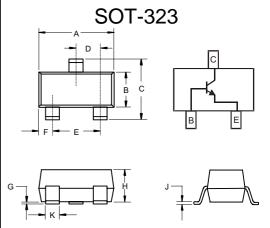
# Electrical Characteristics @ $25^{\circ}$ Unless Otherwise Specified

Symbol	Parameter	Min	Тур	Max	Units
$V_{(BR)CBO}$	Collector -base breakdown voltage $(I_C=100\mu A, I_E=0)$	40			V
V <sub>(BR)CEO</sub>	Collector-emitter breakdown voltage (I <sub>C</sub> =1mA, I <sub>B</sub> = 0)	30			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage $(I_E=100\mu A,\ I_c=0)$	4			V
І <sub>сво</sub>	Collector cut-off current (V <sub>CB</sub> =40V,I <sub>E</sub> =0)			0.1	μΑ
I <sub>EBO</sub>	Emitter cut-off current $(V_{EB}=4V, I_c=0)$			0.5	μΑ
h <sub>FE</sub>	DC Current Gain (V <sub>CE</sub> =6V,I <sub>C</sub> =1mA)	40		200	
C <sub>C rbb</sub>	Collector-base time constant (V <sub>CE</sub> =6V, I <sub>C</sub> =1mA,f=30MHz)			25	ps
$C_{re}$	Reverse transfer capacitance (V <sub>CB</sub> =10V, f=1.0MHz)		0.55		pF
f⊤	Transition frequency (V <sub>CE</sub> =6V, Ic=1mA,)	260	550		MHz

### **hfe CLASSIFICATION**

Rank	R	0	Υ
Ramge	40~80	70~140	100~200
Marking	QR	QO	QY

# NPN Silicon Epitaxial Transistors



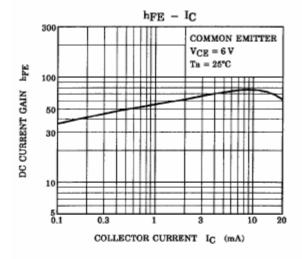
DIMENSIONS					
	INCHES MM				
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.071	.087	1.80	2.20	
В	.045	.053	1.15	1.35	
С	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
Е	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
Н	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

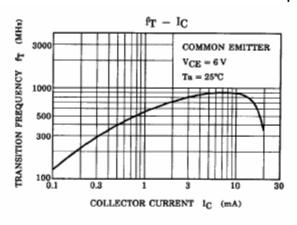
# Suggested Solder Pad Layout 0.70 0.90 1.90 mm

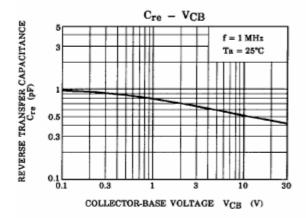


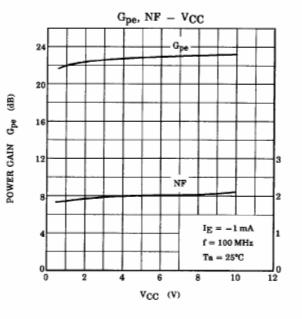
# 2SC4215

## **Micro Commercial Components**



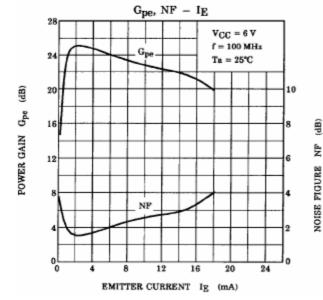


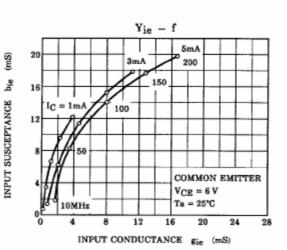




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NOISE FIGURE NF







# **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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