

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Small reverse transfer capacitance : $C_{re} = 0.55\text{pF}$ (typ.).
- Low noise figure : $NF=2\text{dB}$ (typ.) ($f=100\text{ MHz}$)

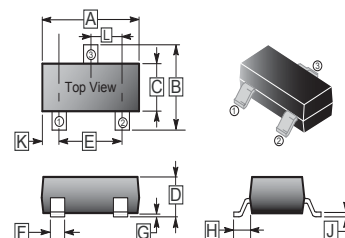
CLASSIFICATION OF h_{FE}

Product-Rank	2SC4215-R	2SC4215-O	2SC4215-Y
Range	40~80	70~140	100~200
Marking	QR	QO	QY

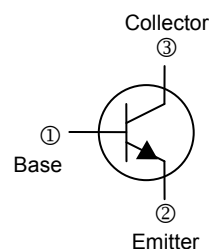
PACKAGE INFORMATION

Package	MPQ	LeaderSize
SOT-323	3K	7' inch

SOT-323



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			



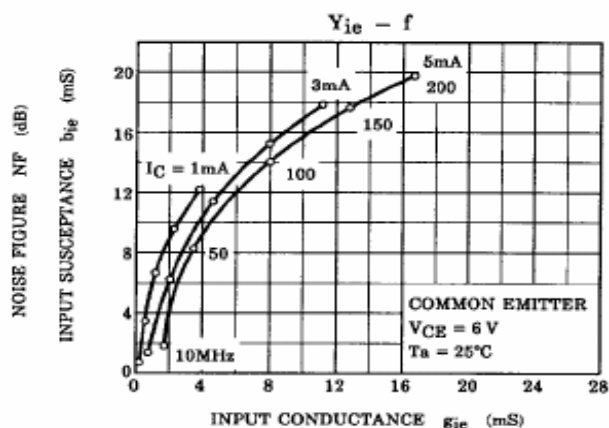
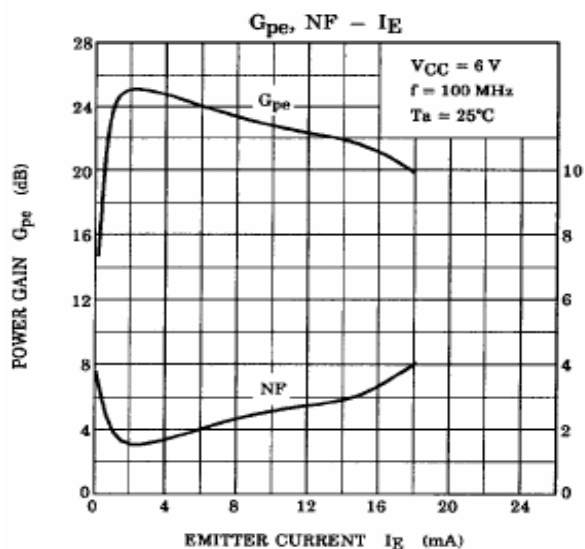
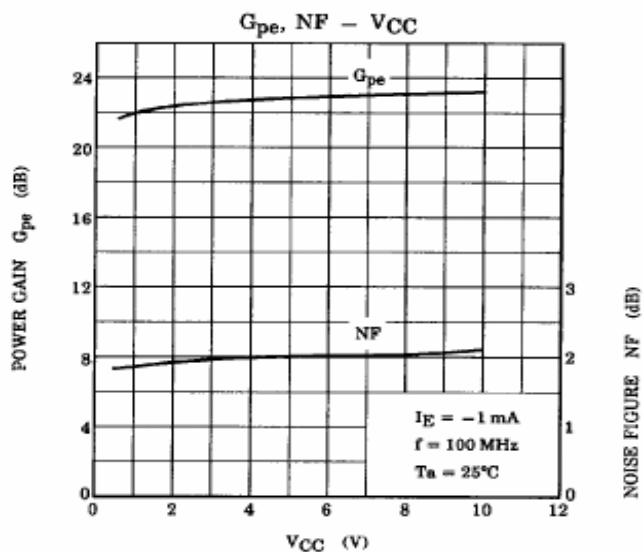
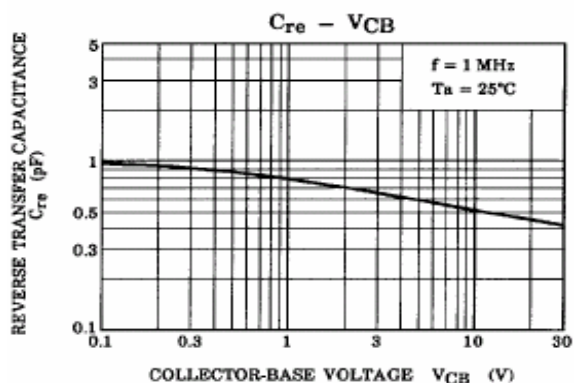
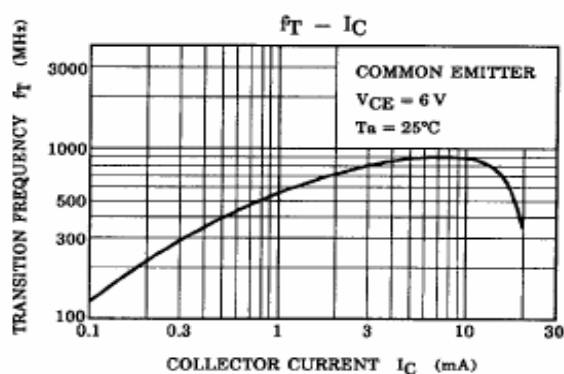
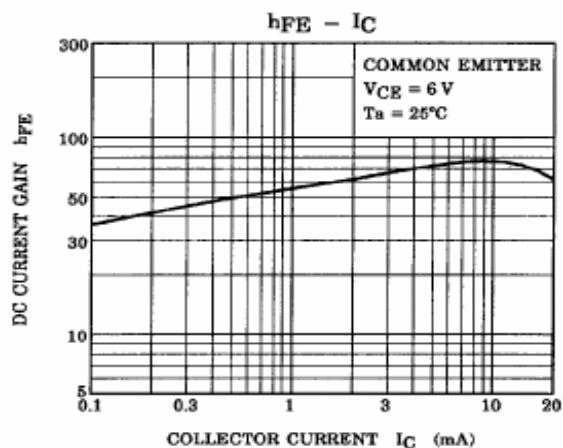
ABSOLUTE MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	20	mA
Collector Power Dissipation	P_C	100	mW
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	$I_C=100\mu\text{A}, I_E=0$
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	$I_C=1\text{mA}, I_B=0$
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4	-	-	V	$I_E=100\mu\text{A}, I_C=0$
Collector Cut-off Current	I_{CBO}	-	-	0.1	μA	$V_{CB}=40\text{V}, I_E=0$
Emitter Cut-off Current	I_{EBO}	-	-	0.5	μA	$V_{EB}=4\text{V}, I_C=0$
DC Current Gain	h_{FE}	40	-	200		$V_{CE}=6\text{V}, I_C=1\text{mA}$
Collector-Base Time Constant	C_c, τ_{bb}	-	-	25	ps	$V_{CE}=6\text{V}, I_C=1\text{mA}, f=30\text{MHz}$
Transition Frequency	f_T	260	550	-	MHz	$V_{CE}=6\text{V}, I_C=1\text{mA}$
Reverse Transfer Capacitance	C_{re}	-	0.55	-	pF	$V_{CB}=10\text{V}, f=1\text{MHz}$
Noise Figure	NF	-	2	5	dB	$V_{CC}=6\text{V}, I_C=1\text{mA}, f=100\text{MHz},$
Power Gain	G _{pe}	17	23	-	dB	

CHARACTERISTIC CURVES



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