Elektronische Bauelemente

2SC4215

0.02A , 40V

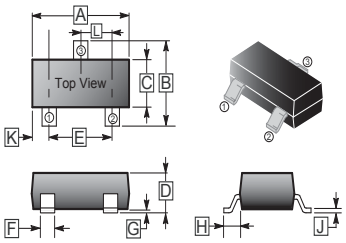
NPN Plastic-Encapsulate Transistor

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

FEATURES

- Small reverse transfer capacitance：Cre = 0.55pF (typ.).
- Low noise figure：NF=2dB (typ.) (f=100 MHz)

SOT-323



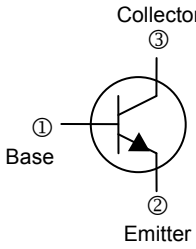
REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	-	-
E	1.20	1.40	L	0.650 TYP.	
F	0.20	0.40			

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



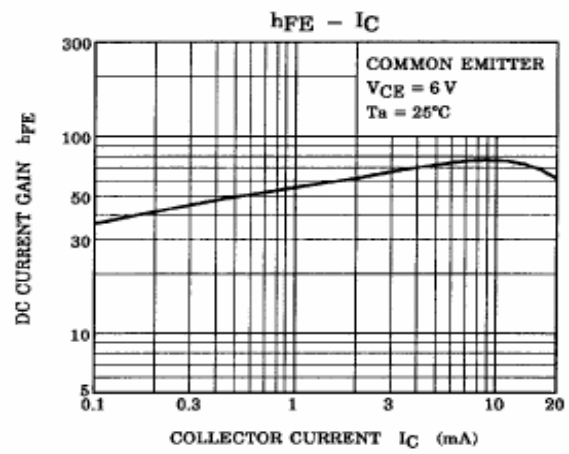
ABSOLUTE MAXIMUM RATINGS (T_A = 25°C unless otherwise specified)

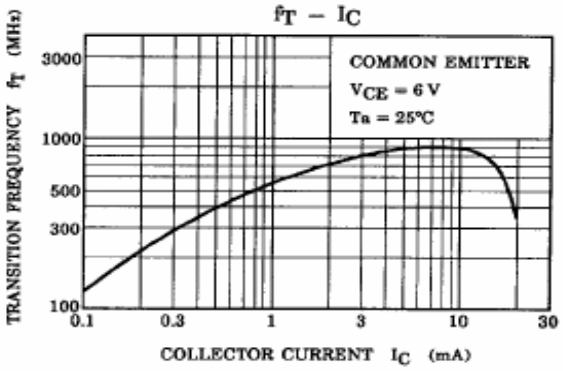
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	40	V
Collector-Emitter Voltage	V_{CEO}	30	V
Emitter-Base Voltage	V_{EBO}	4	V
Collector Current	I_C	20	mA
Collector Power Dissipation	P_C	100	mW
Junction & Storage temperature	T_J, T_{STG}	150, -55~150	°C

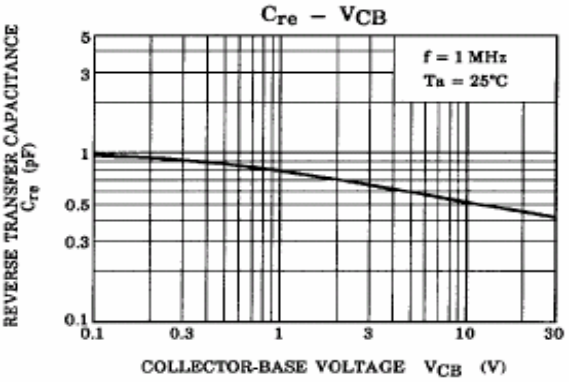
ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

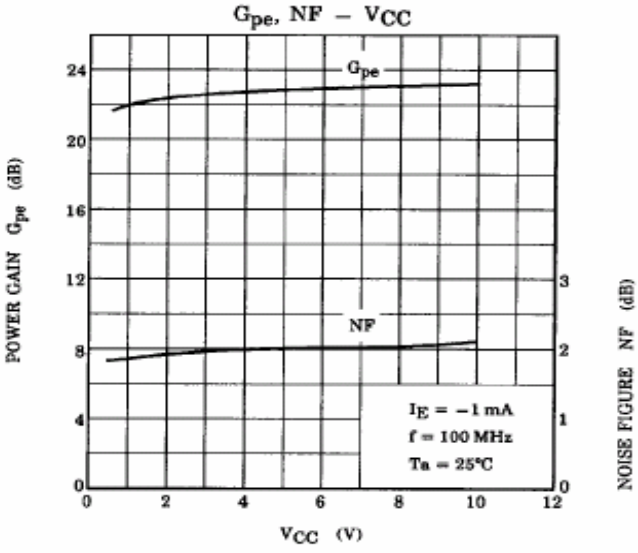
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	$V_{(BR)CBO}$	40	-	-	V	I_C=100μA, I_E=0
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	30	-	-	V	I_C=1mA, I_B=0
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	4	-	-	V	I_E=100μA, I_C=0
Collector Cut-off Current	I_{CBO}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

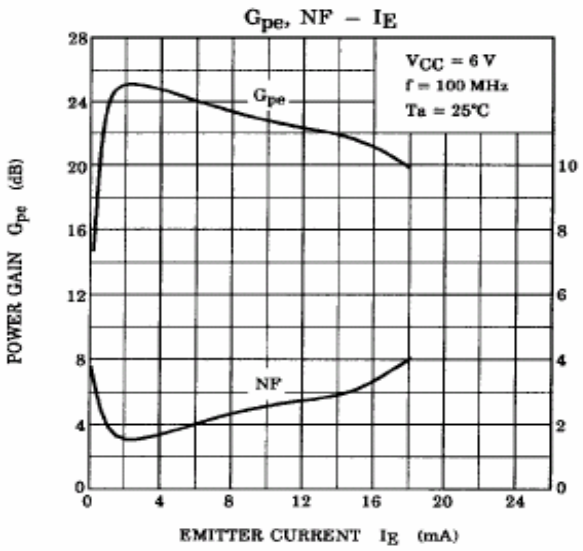
CHARACTERISTIC CURVES

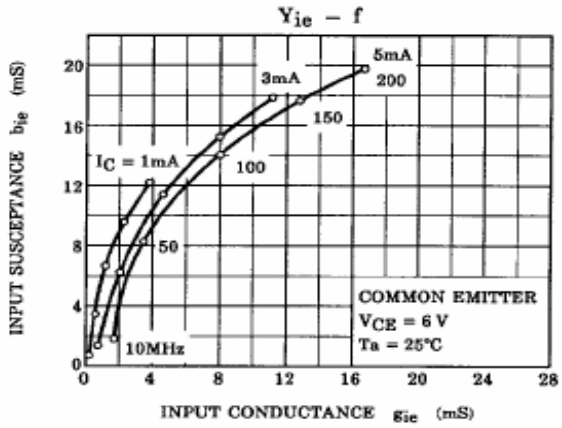












CHARACTERISTIC CURVES

