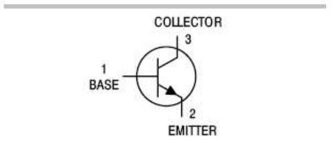
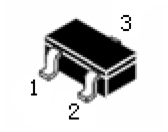
NPN Silicon Epitaxial Planar Transistor **2SC4215**

FEATURES

- Small reverse transfer capacitance.
- Low noise figure.

Lead-free





SOT-323

APPLICATIONS

- FM,RF,MIX,IF Amplifier Applications.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4215	QR/QO/QY	SOT-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	4	V
I_C	Collector Current -Continuous	20	mA
I_B	Base Current	4	mA
P_C	Collector Dissipation	150	mW
T_j,T_{stg}	Junction and Storage Temperature	-55 to +150	℃

NPN Silicon Epitaxial Planar Transistor **2SC4215**

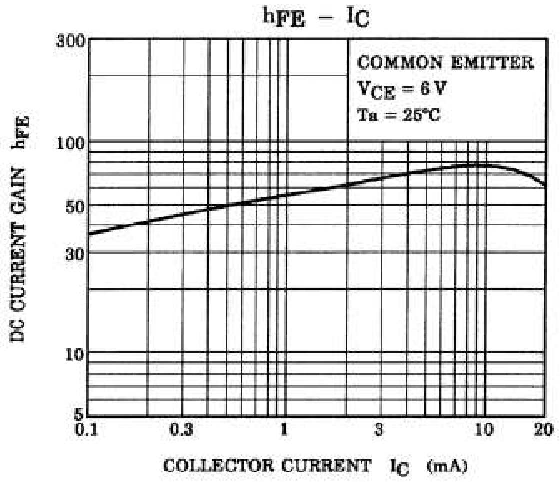
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

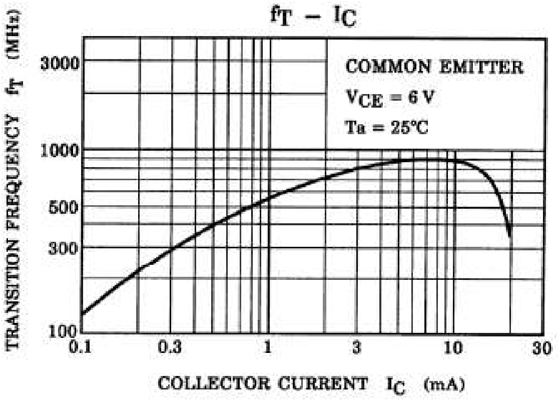
Parameter	**Symbol**	**Test conditions**	**MIN**	**TYP**	**MAX**	**UNIT**
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA,I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA,I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA,I_C=0	4			V
Collector cut-off current	I_{CBO}	V_{CB}=40V,I_E=0			0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=4V,I_C=0			0.5	μA
DC current gain	h_{FE}	V_{CE}=6V,I_C=1mA	40		200	
Collector-base time constant	$C_C.r_{bb}'$	V_{CE}=6V,I_C=1mA			25	ps
Transition frequency	f_T	V_{CE}=6V, I_E= 1mA	260	550		MHz

CLASSIFICANTION OF h_{FE}

Marking	QR	QO	QY
h_{FE}	40-80	70-140	100-200

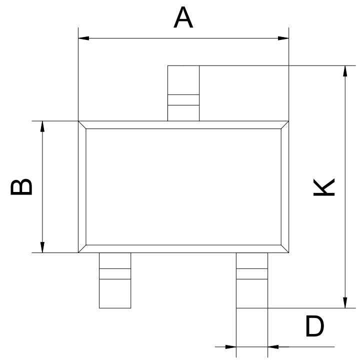
TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

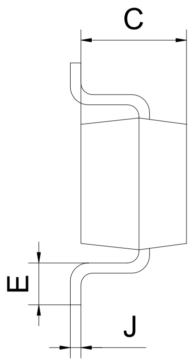


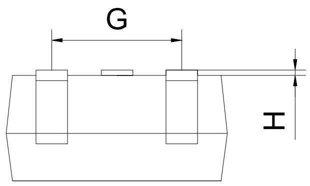


PACKAGE OUTLINE

Plastic surface mounted package SOT-323

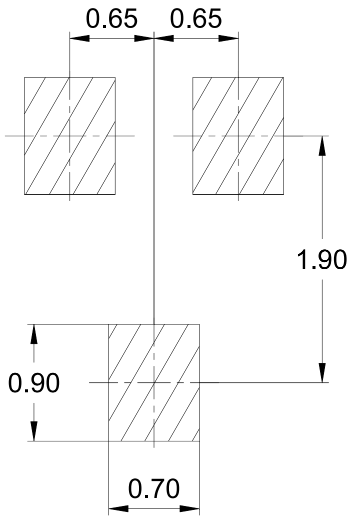






SOT-323		
Dim	Min	Max
A	2.00	2.20
B	1.15	1.35
C	0.95 Typical	
D	0.30 Typical	
E	0.25	0.40
G	1.2	1.4
H	0.02	0.10
J	0.10 Typical	
K	2.20	2.40
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
2SC4215	SOT-323	3000/Tape&Reel