

NPN Silicon Epitaxial Planar Transistor

2SC4215W

FEATURES

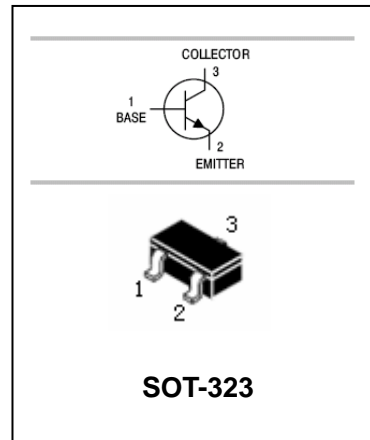
- Power dissipation. ($P_C=100\text{mW}$)



Lead-free

APPLICATIONS

- Audio frequency general purpose amplifier.



SOT-323

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4215W	QR/QO/QY	SOT-323

MAXIMUM RATING @ $T_a=25^\circ\text{C}$ 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
P_C	Collector Dissipation	150	mW
T_j, T_{stg}	Junction and Storage Temperature	-55~150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

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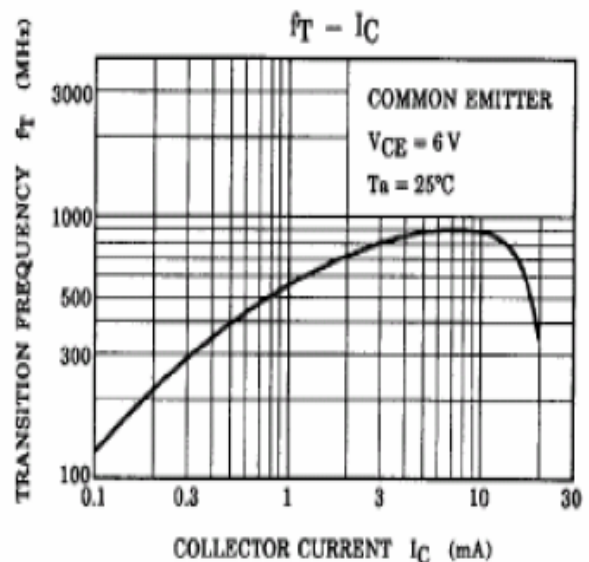
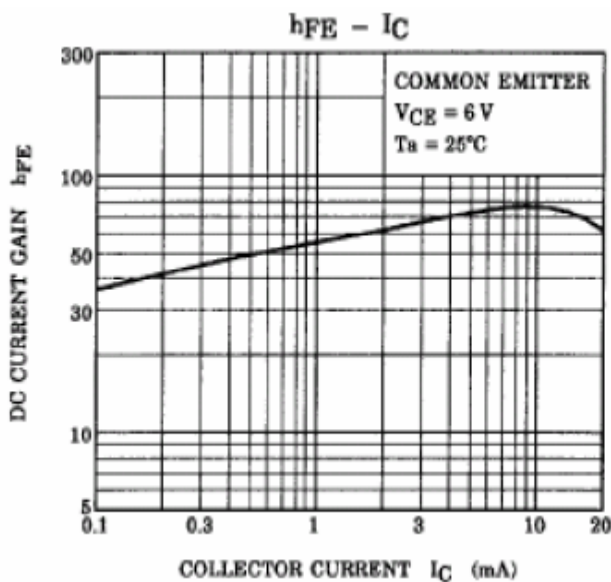
2SC4215W

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	4			V
Collector cut-off current	I_{CBO}	$V_{CB}=4V, I_E=0$			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	$C_C \cdot r_{bb}'$	$V_{CE}=6V, I_C=1mA$			25	ps
Transition frequency	f_T	$V_{CE}=6V, I_E=1mA$	260	550		MHz

CLASSIFICATION OF h_{FE}

Marking	QR	QO	QY
h_{FE}	90-180	135-270	200-400

TYPICAL CHARACTERISTICS @ $T_a=25^\circ C$ unless otherwise specified



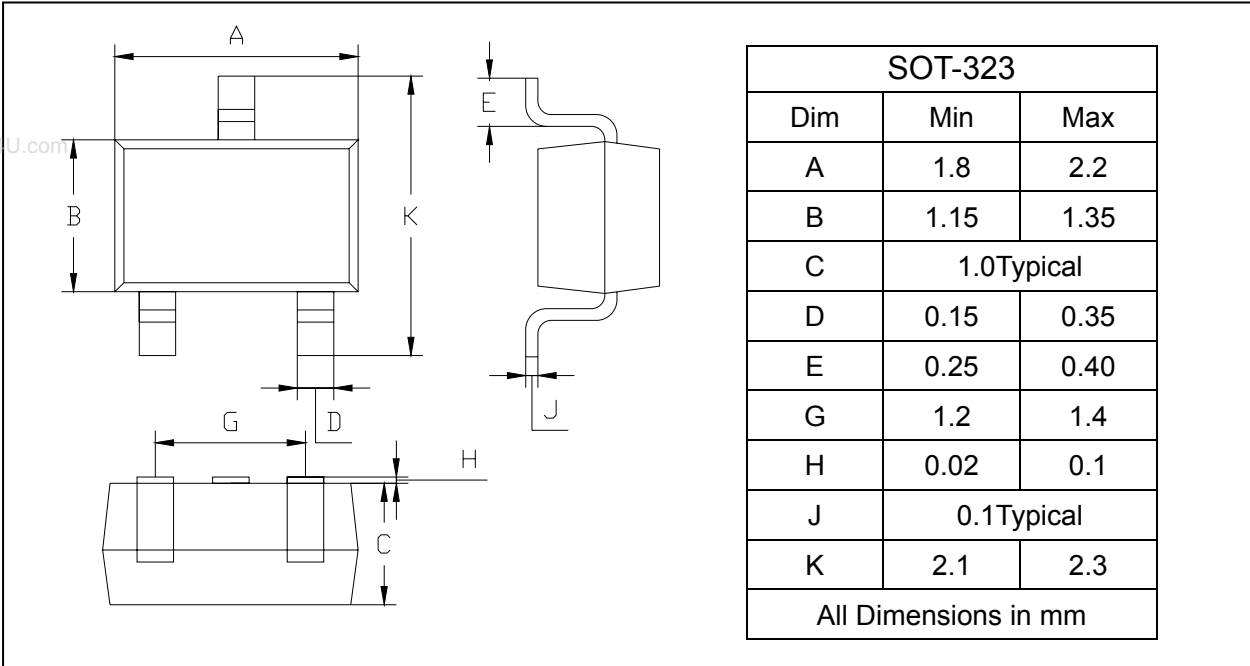
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PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



PACKAGE INFORMATION

Device	Package	Shipping
2SC4215W	SOT-323	3000/Tape&Reel