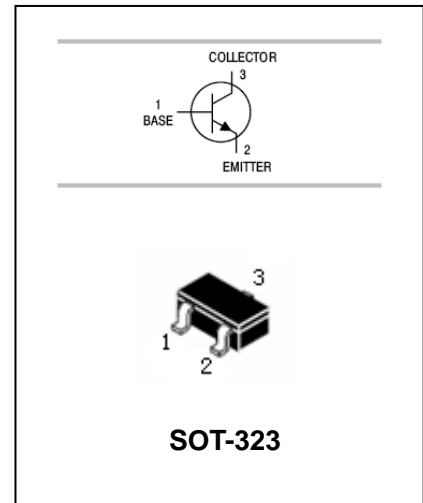


NPN Silicon Epitaxial Planar Transistor

2SC1623W

FEATURES

- High DC current gain: $h_{FE}=200$ TYP.
- High voltage: $V_{CEO}=50$ V.
- Power dissipation. ($P_C=200$ mW)



APPLICATIONS

- Audio frequency general purpose amplifier.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC1623W	L4/L5/L6/L7	SOT-323

MAXIMUM RATING @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	60	V
V_{CEO}	Collector-Emitter Voltage	50	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	100	mA
P_C	Collector Dissipation	200	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^{\circ}\text{C}$

NPN Silicon Epitaxial Planar Transistor

2SC1623W

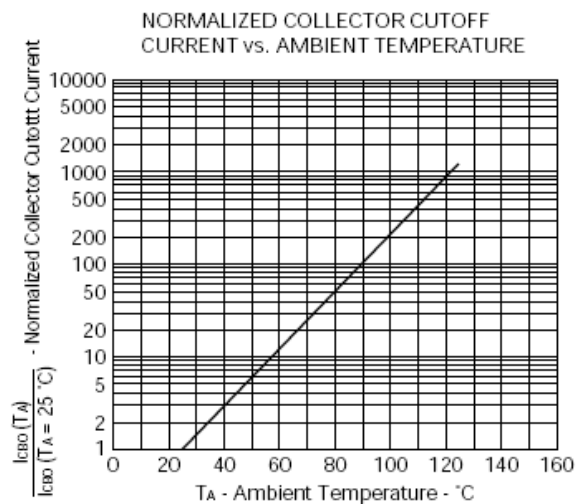
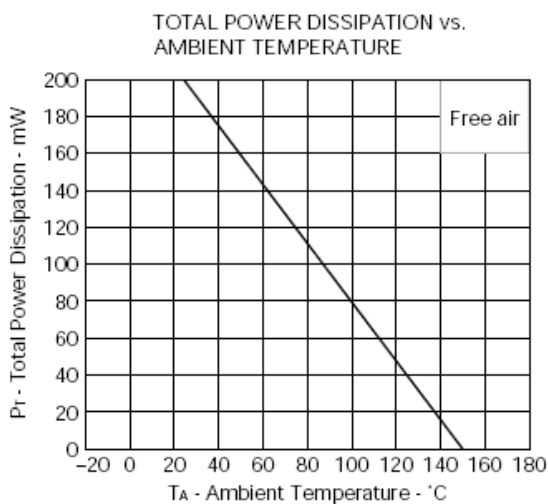
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu A, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=1mA$	90	200	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$		0.15	0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$		0.86	1.0	V
Transition frequency	f_T	$V_{CE}=6V, I_E=-10mA$		250		MHz
Output capacitance	C_{ob}	$V_{CE}=6V, I_E=0mA$ $f=1.0MHz$		3.0		pF

CLASSIFICATION OF h_{FE}

Marking	L4	L5	L6	L7
h_{FE}	90-180	135-270	200-400	300-600

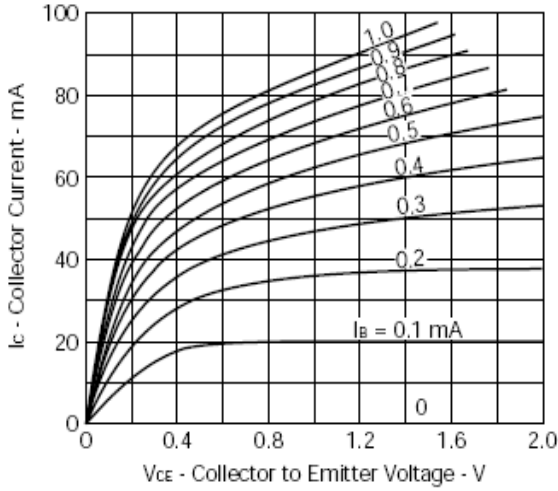
TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



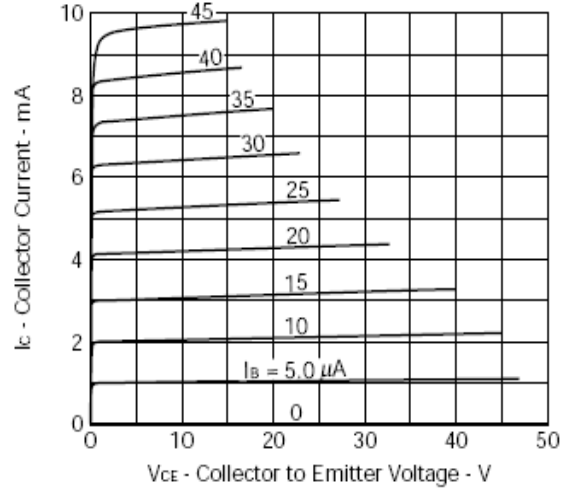
NPN Silicon Epitaxial Planar Transistor

2SC1623W

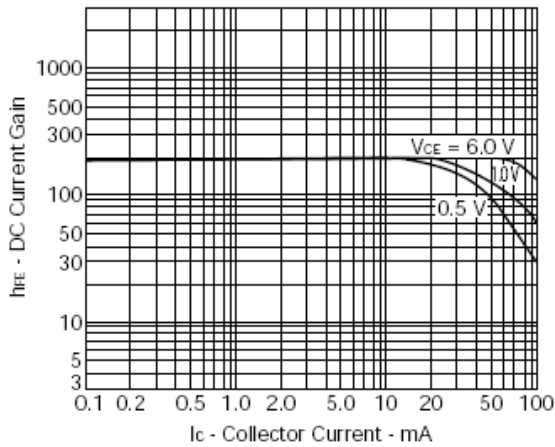
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



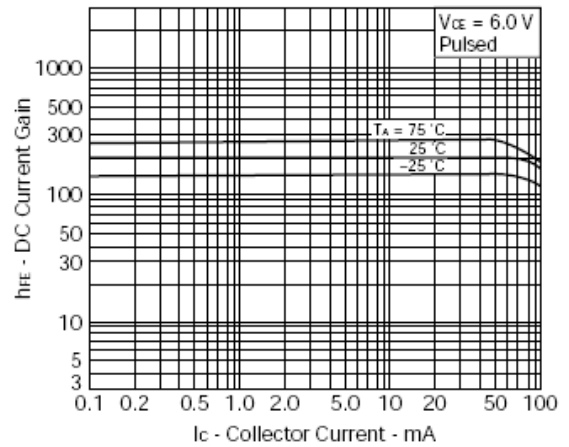
COLLECTOR CURRENT vs. COLLECTOR TO EMITTER VOLTAGE



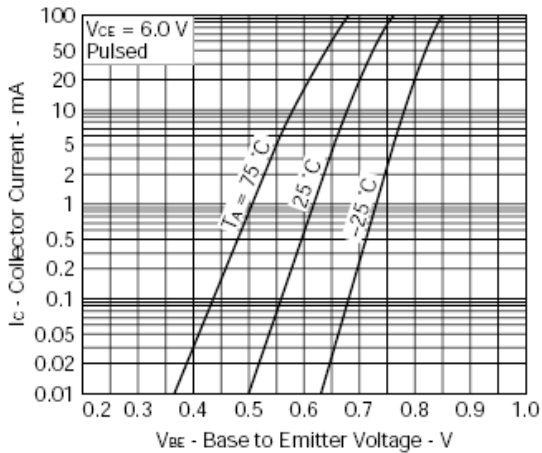
DC CURRENT GAIN vs. COLLECTOR CURRENT



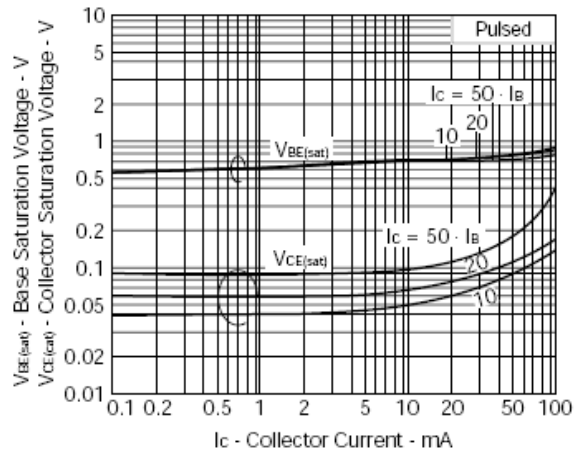
DC CURRENT GAIN vs. COLLECTOR CURRENT



COLLECTOR CURRENT vs. BASE TO EMITTER VOLTAGE



COLLECTOR AND BASE SATURATION VOLTAGE vs. COLLECTOR CURRENT



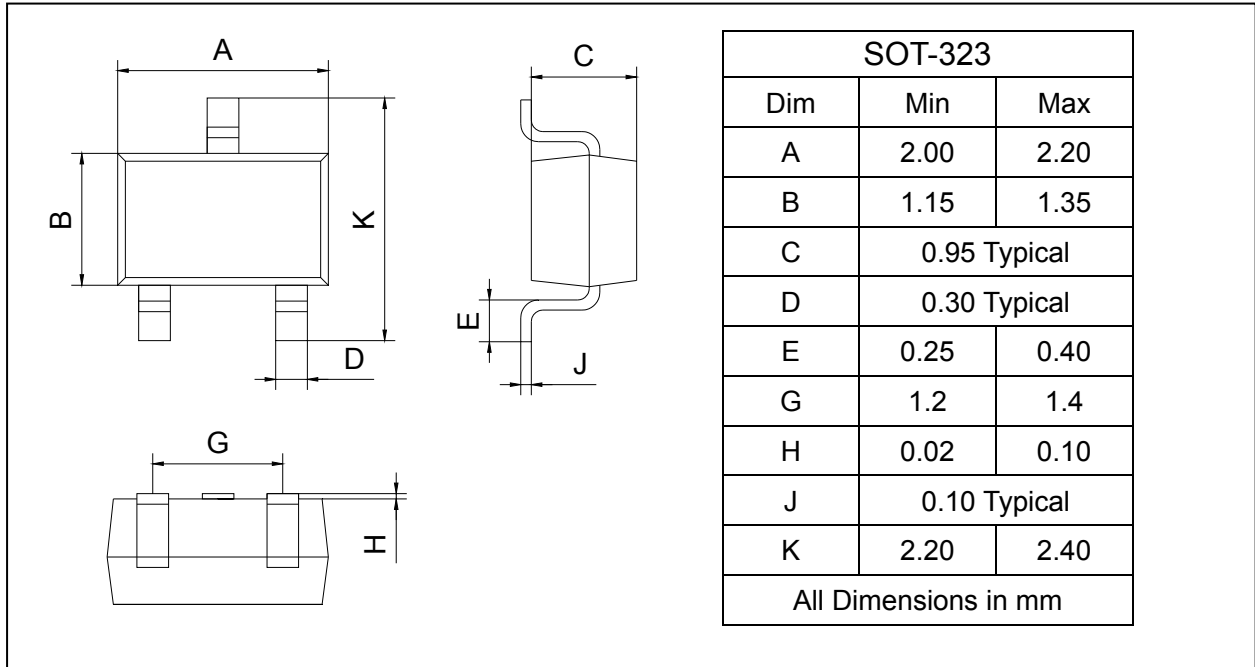
NPN Silicon Epitaxial Planar Transistor

2SC1623W

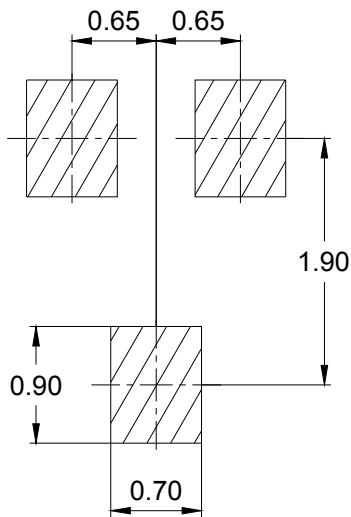
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SC1623W	SOT-323	3000/Tape&Reel