

NPN Silicon Epitaxial Planar Transistor

2SC4555

FEATURES

- Complements the 2SA1745.

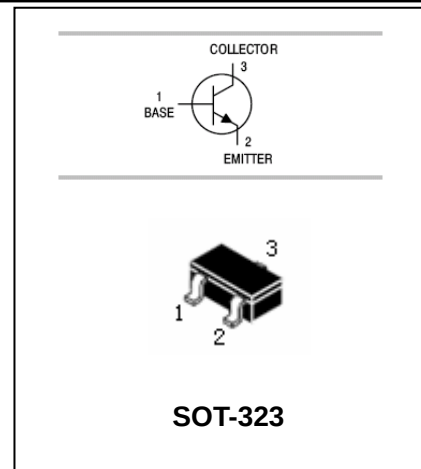


APPLICATIONS

- Ideal for low-voltage operation.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SC4555	UT	SOT-323



MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V _{CBO}	Collector-Base Voltage	20	V
V _{CEO}	Collector-Emitter Voltage	15	V
V _{EBO}	Emitter-Base Voltage	5	V
I _C	Collector Current -Continuous	500	mA
P _C	Collector Dissipation	150	mW
T _j , T _{stg}	Junction and Storage Temperature	-55 to +150	°C



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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=10\mu A, I_E=0$	20			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	15			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=10\mu A, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=15V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=4V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=2V, I_C=10mA$ $V_{CE}=2V, I_C=400mA$	135 80		600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=5mA, I_B=0.5mA$ $I_C=200mA, I_B=10mA$		15 160	30 300	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-200mA, I_B=-10mA$		0.95	1.2	V
Transition frequency	f_T	$V_{CE}=2V, I_C=50mA$		300		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V, f=1MHz$		4.0		pF

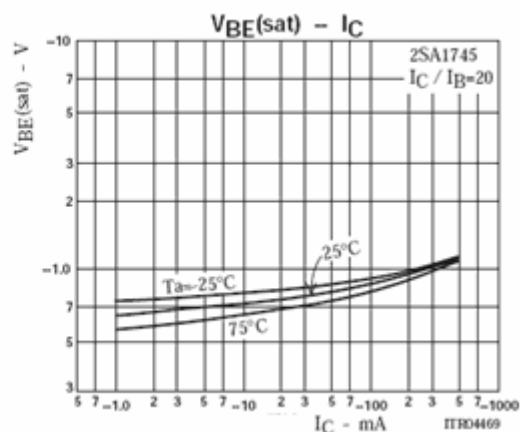
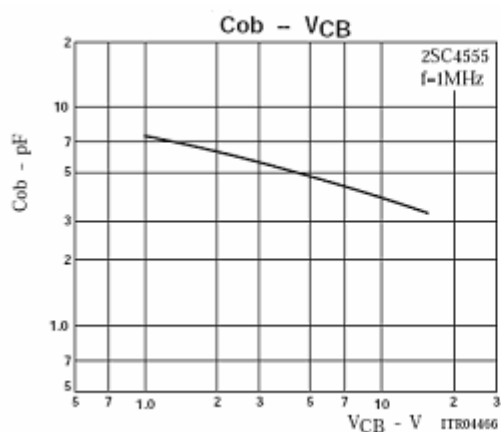
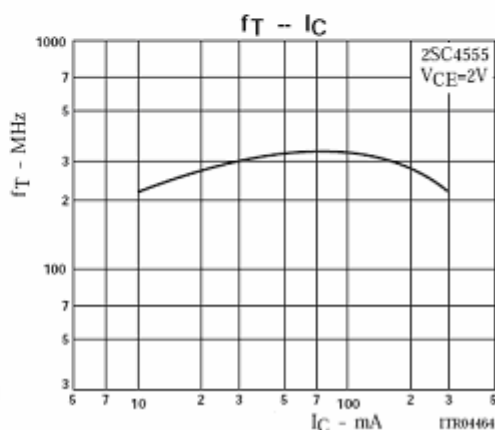
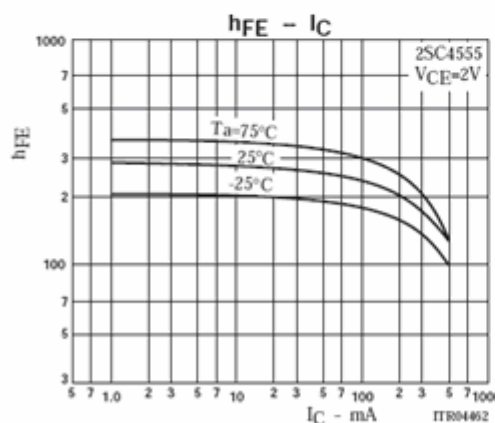
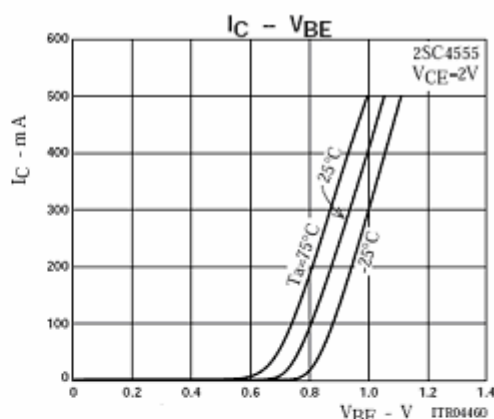
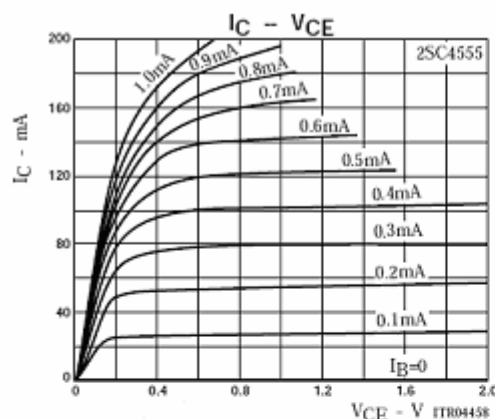
CLASSIFICATION OF $h_{FE(1)}$

Range	135-270	200-400	300-600
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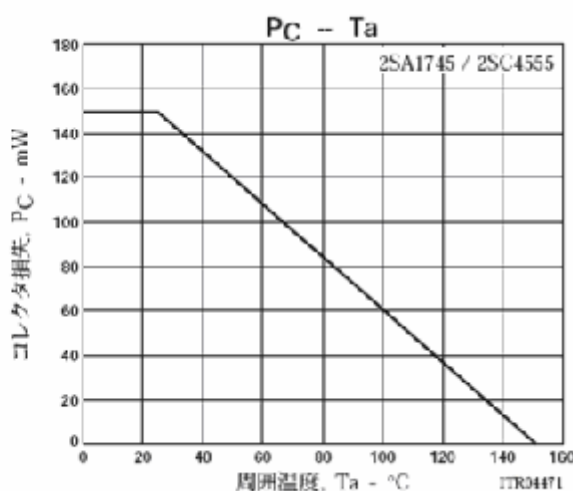
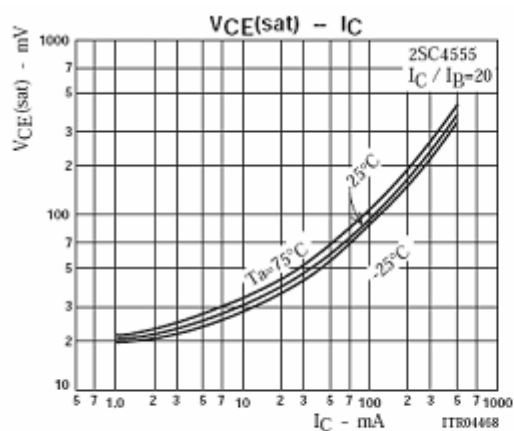
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TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



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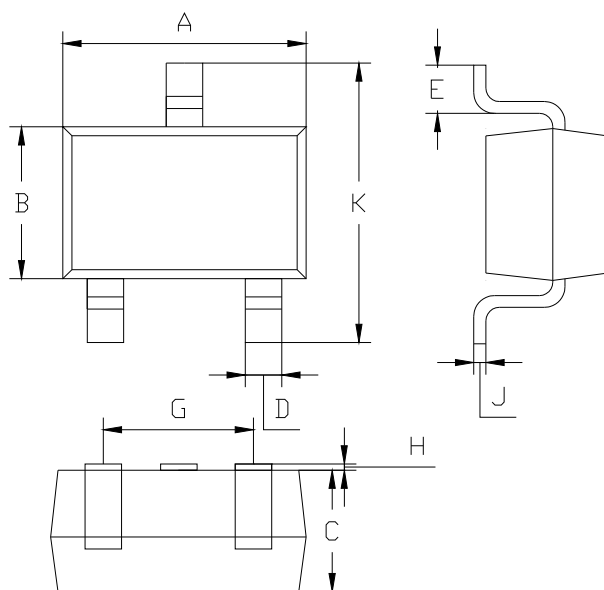
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PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



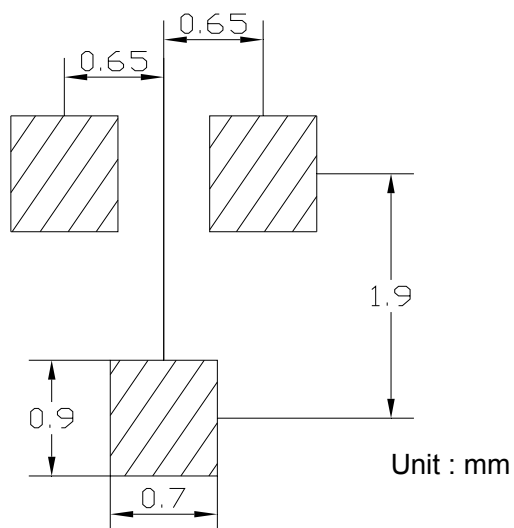
SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.2	2.4
All Dimensions in mm		



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SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SC4555	SOT-323	3000/Tape&Reel