

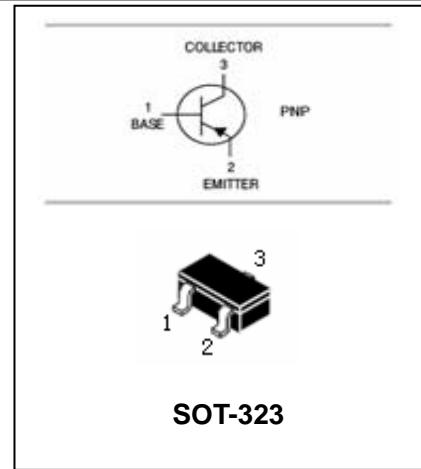


**PNP Silicon Epitaxial Planar Transistor**

**2SA1745**

**FEATURES**

- Complements the 2SC4555.



**APPLICATIONS**

- Ideal for low-voltage operation.

**ORDERING INFORMATION**

Type No.	Marking	Package Code
2SA1745	ES	SOT-323

**MAXIMUM RATING @ Ta=25°C unless otherwise specified**

Symbol	Parameter	Value	Units
V <sub>CBO</sub>	Collector-Base Voltage	-20	V
V <sub>CEO</sub>	Collector-Emitter Voltage	-15	V
V <sub>EBO</sub>	Emitter-Base Voltage	-5	V
I <sub>C</sub>	Collector Current -Continuous	-500	mA
P <sub>C</sub>	Collector Dissipation	150	mW
T <sub>j</sub> , T <sub>stg</sub>	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	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB} = -4V, I_C = 0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE} = -2V, I_C = -10mA$ $V_{CE} = -2V, I_C = -400mA$	135 70		600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -5mA, I_B = -0.5mA$ $I_C = -200mA, I_B = -10mA$		-15 -200	-35 -360	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -200mA, I_B = -10mA$		-0.95	-1.2	V
Transition frequency	$f_T$	$V_{CE} = -2V, I_C = -50mA$		400		MHz
Collector output capacitance	$C_{ob}$	$V_{CB} = -10V, f = 1MHz$		6.5		pF

**CLASSIFICATION OF  $h_{FE(1)}$**

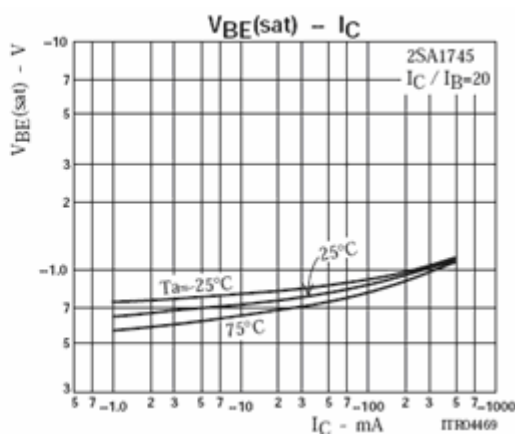
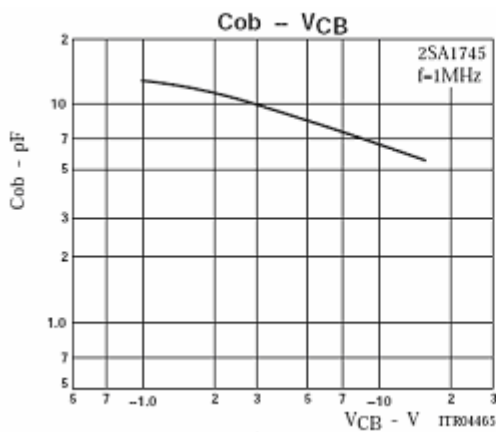
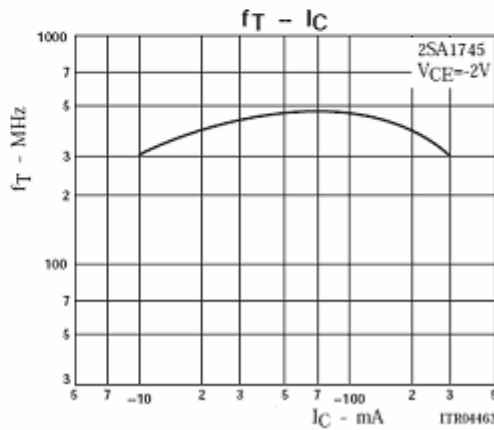
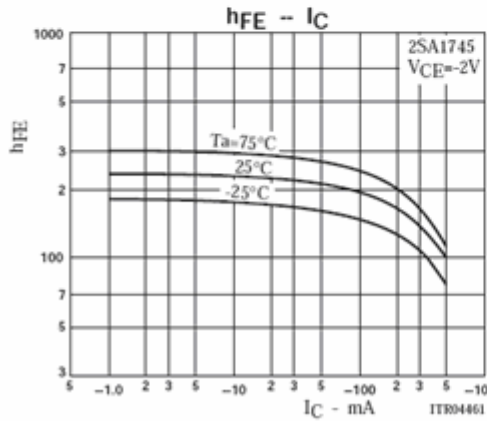
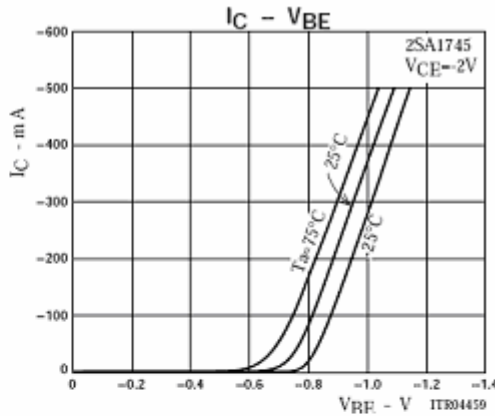
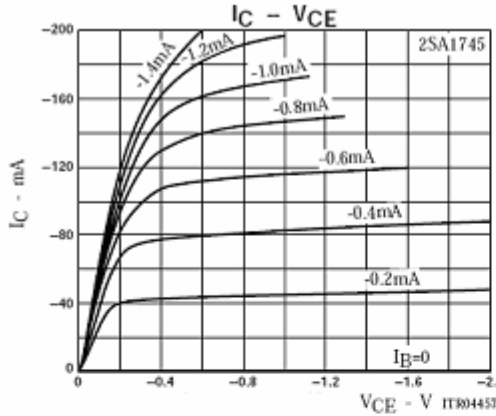
Range	135-270	200-400	300-600



PNP Silicon Epitaxial Planar Transistor

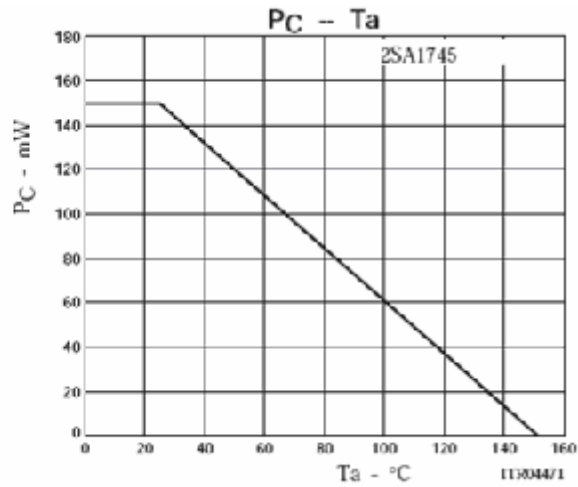
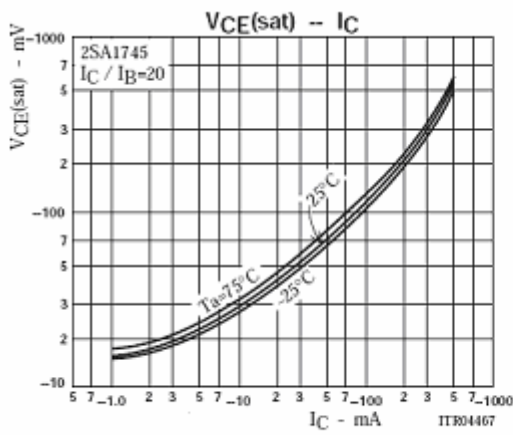
2SA1745

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



**PNP Silicon Epitaxial Planar Transistor**

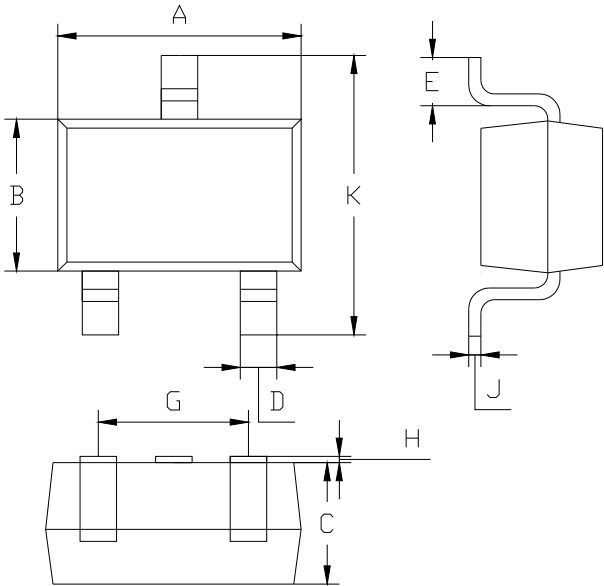
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**PACKAGE OUTLINE**

Plastic surface mounted package

SOT-323



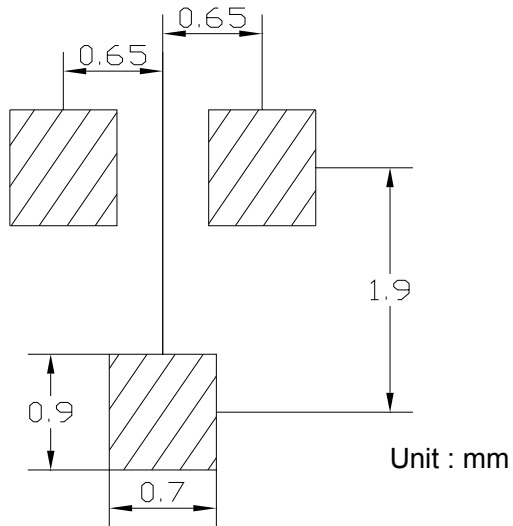
SOT-323		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.15	0.35
E	0.25	0.40
G	1.2	1.4
H	0.02	0.1
J	0.1Typical	
K	2.2	2.4
All Dimensions in mm		



PNP Silicon Epitaxial Planar Transistor

**2SA1745**

SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SA1745	SOT-323	3000/Tape&Reel