

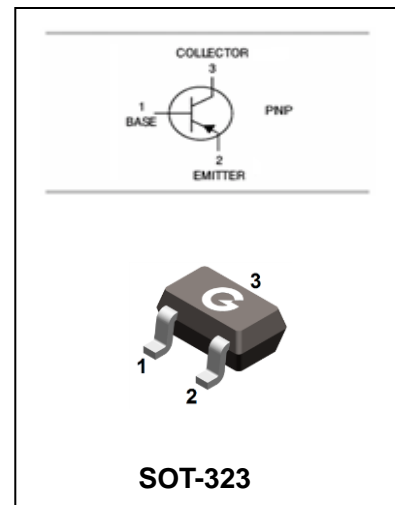
PNP Silicon Epitaxial Planar Transistor

TKTA2014

FEATURES

- Power dissipation ($P_C=200\text{mW}$)
- Excellent h_{FE} Linearity
- Complementary to TKTC4075
- Small package
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



APPLICATIONS

- General purpose application and switching application

ORDERING INFORMATION

Type No.	Marking	Package Code
TKTA2014	SO/SY/SG	SOT-323

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

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

PNP Silicon Epitaxial Planar Transistor

TKTA2014

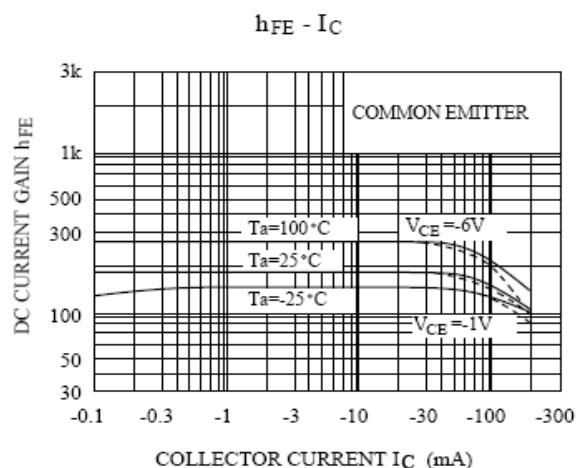
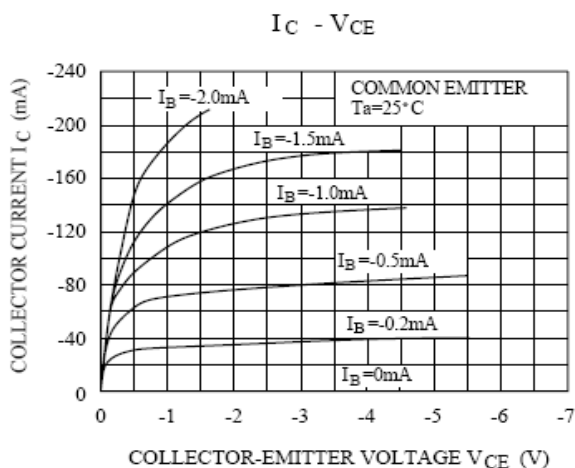
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -0.1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50\text{V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
DC current gain	h_{FE}	$V_{CE} = -6\text{V}, I_C = -2\text{mA}$	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -100\text{mA}, I_B = -10\text{mA}$		-0.1	-0.3	V
Transition frequency	f_T	$V_{CE} = -10\text{V}, I_C = -1\text{mA}$	80			MHz
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$		4	7	pF
Noise figure	NF	$V_{CE} = 6\text{V}, I_C = 0.1\text{mA}, f = 1\text{KHz}, R_g = 10\text{K}\Omega$		1.0	10	dB

CLASSIFICATION OF h_{FE}

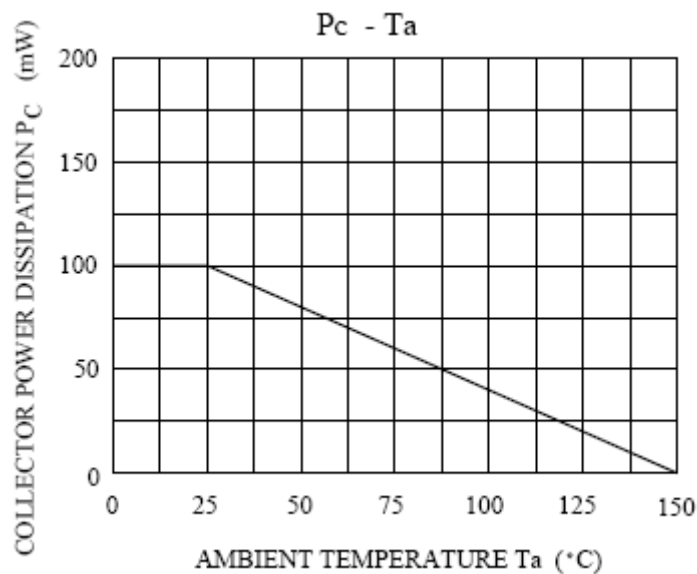
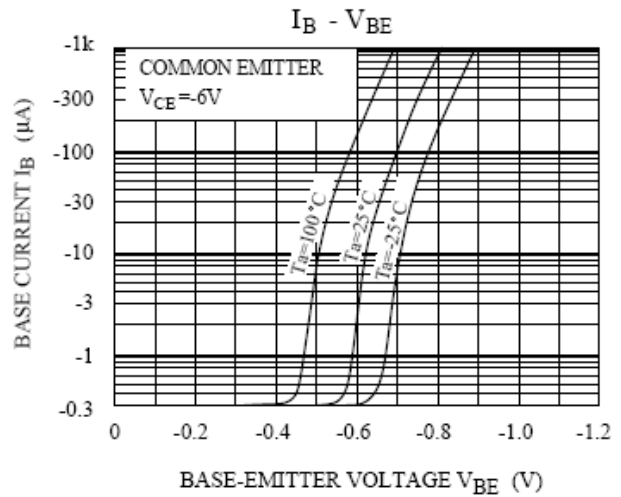
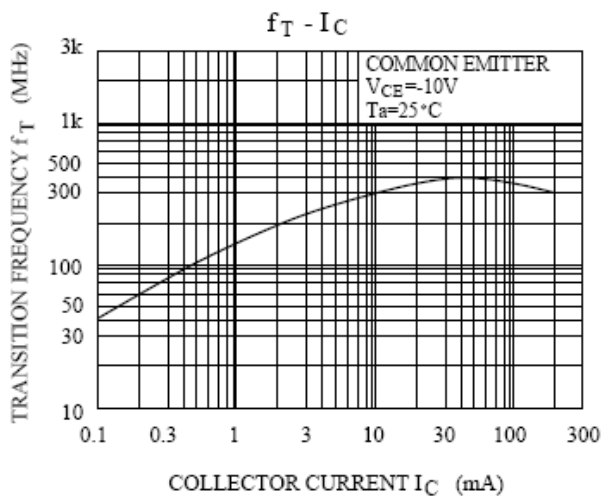
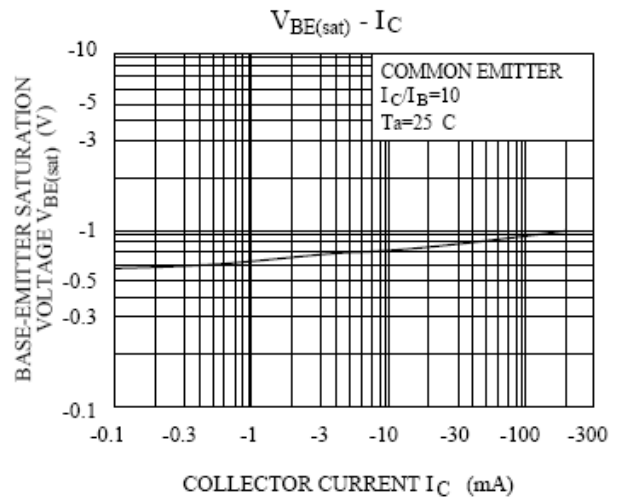
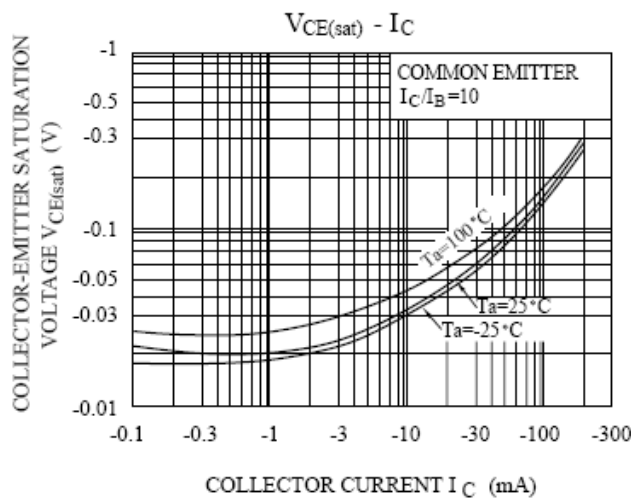
Rank	O	Y	G
Range	70-140	120-240	200-400
marking	SO	SY	SG

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified



PNP Silicon Epitaxial Planar Transistor

TKTA2014



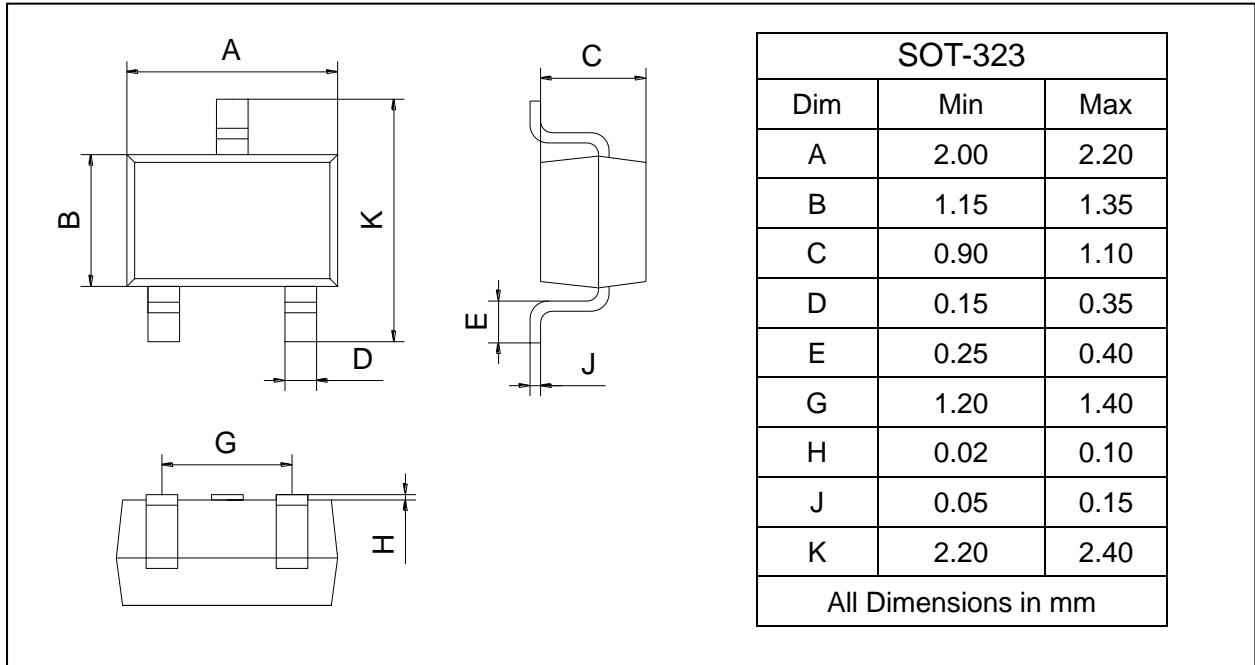
PNP Silicon Epitaxial Planar Transistor

TKTA2014

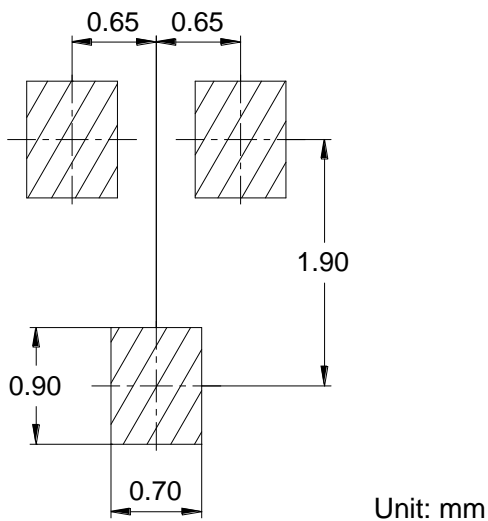
PACKAGE OUTLINE

Plastic surface mounted package

SOT-323



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
TKTA2014	SOT-323	3000 pcs / Tape & Reel