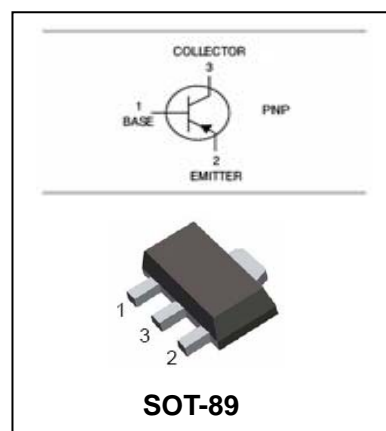


PNP SILICON EPITAXIAL TRANSISTOR

2SB806

FEATURES

- World Standard Miniature Package: SOT-89
- High Collector to Emitter Voltage:
 $V_{CE0} > -120V$



ORDERING INFORMATION

Type No.	Marking	Package Code
2SB806□	KR/KQ/KP	SOT-89

□: none is for Lead Free package;

“G” is for Halogen Free package.

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-120	V
V_{CEO}	Collector-Emitter Voltage	-120	V
V_{EBO}	Emitter-Base Voltage	-5.0	V
I_C	Collector Current (DC)	-0.7	A
P_T	Total power dissipation	2.0	W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55 to +150	°C

PNP SILICON EPITAXIAL TRANSISTOR

2SB806

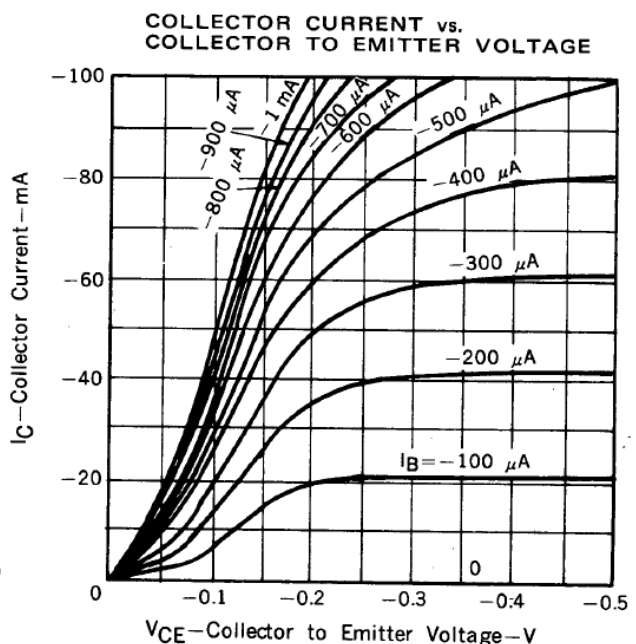
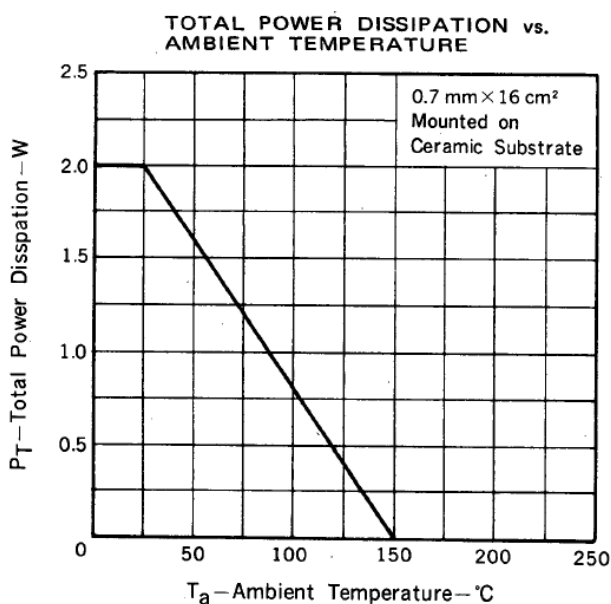
ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector cut-off current	I_{CBO}	$V_{CB}=-120\text{V}, I_E=0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB}=-5.0\text{V}, I_C=0$			-100	nA
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C/I_B=-500\text{mA}/-50\text{mA}$		-0.4	-0.6	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C/I_B=-500\text{mA}/-50\text{mA}$		-0.9	-1.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=-10\text{V}, I_C=-10\text{mA}$	-550	-620	-650	mV
DC current gain(note)	h_{FE}	$V_{CE}=-1.0\text{V}, I_C=-5.0\text{mA}$	45	200		
		$V_{CE}=-1.0\text{V}, I_C=-100\text{mA}$	90	200	400	
Current gain bandwidth product	f_T	$V_{CE}=-10\text{V}, I_E=10\text{mA}$		75		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, f=1\text{MHz}, I_E=0\text{A}$		14		pF

CLASSIFICATION OF h_{FE2}

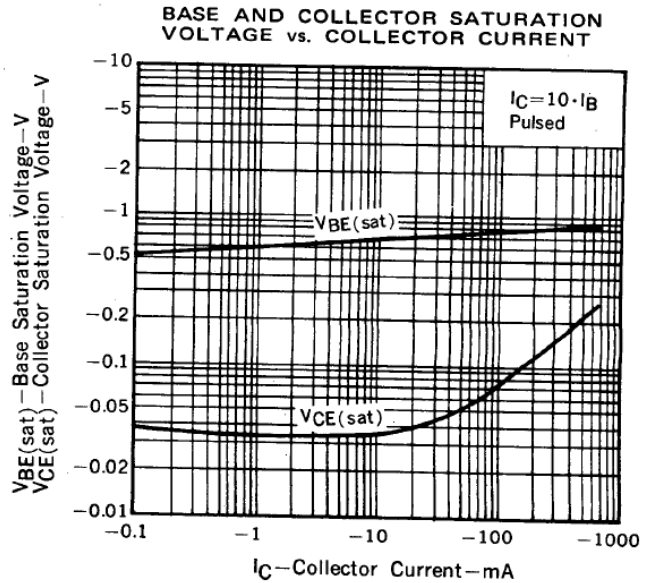
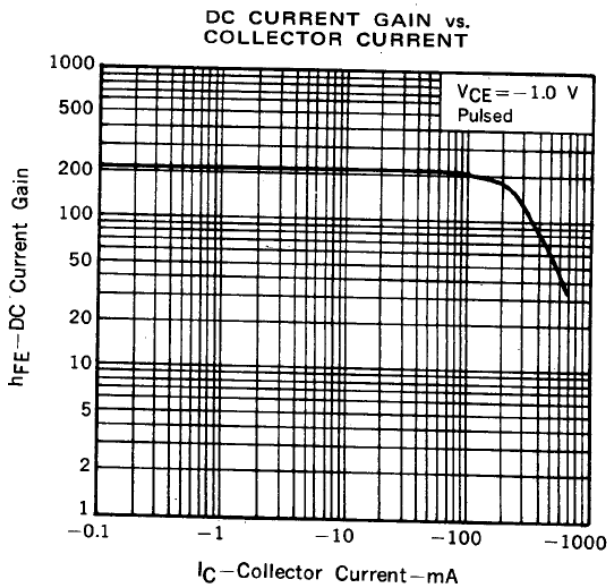
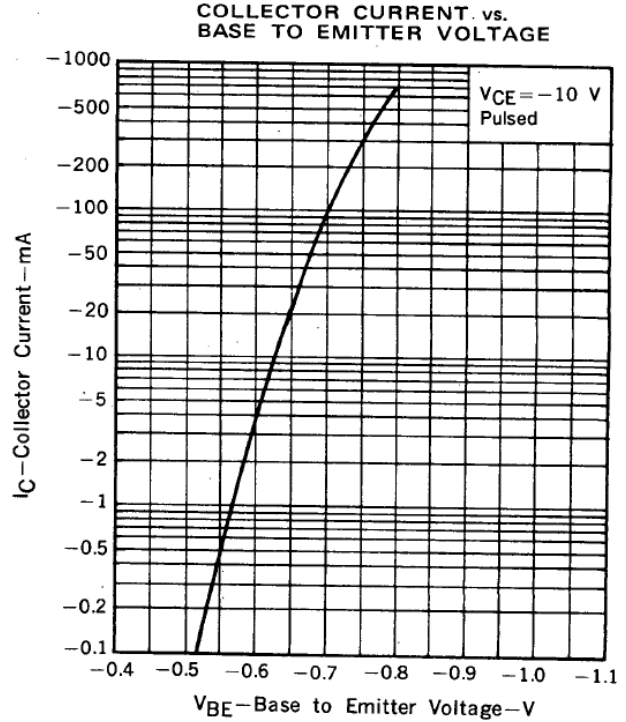
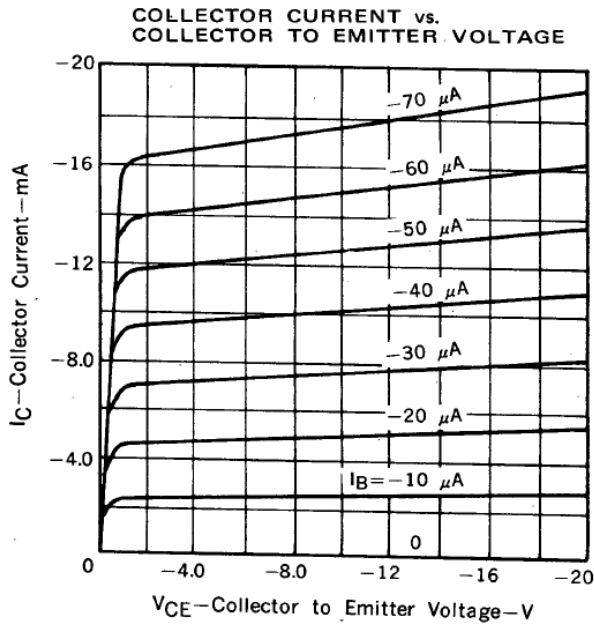
RANGE	90-180	135-270	200-400
MARKING	KR	KQ	KP

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



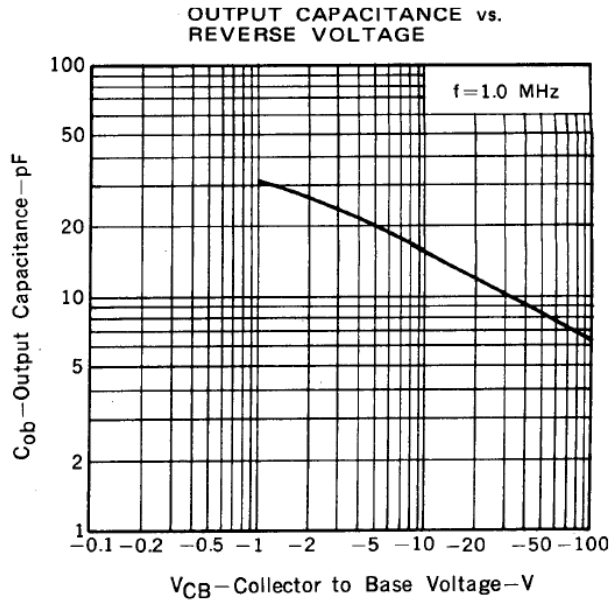
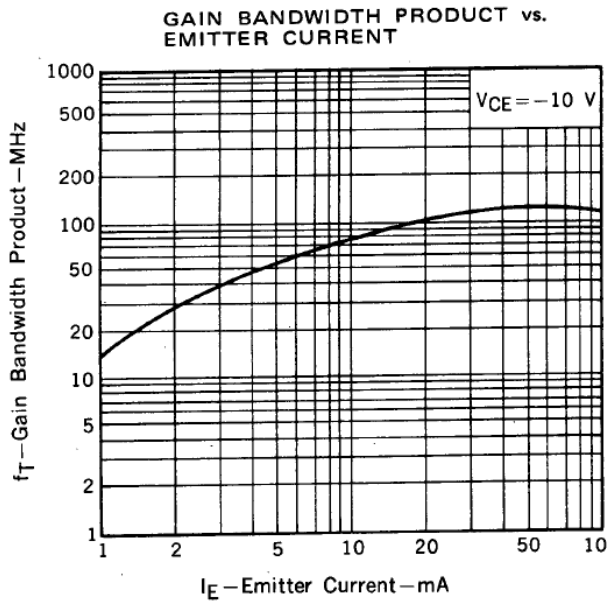
PNP SILICON EPITAXIAL TRANSISTOR

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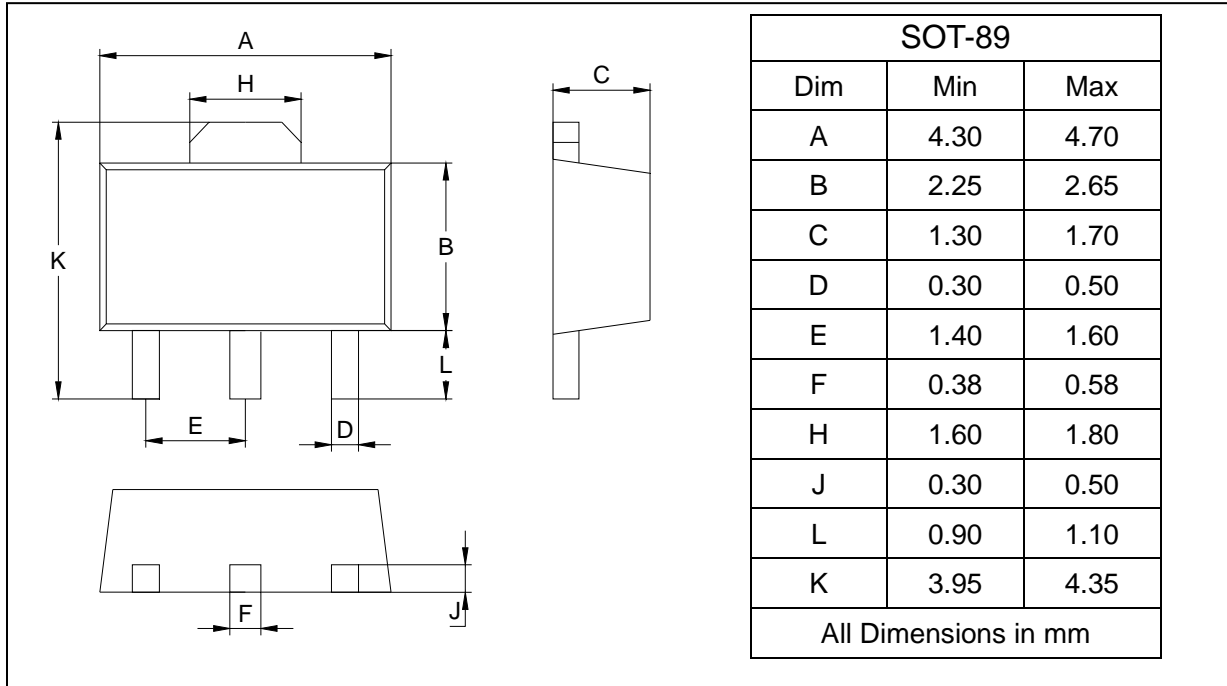
PNP SILICON EPITAXIAL TRANSISTOR

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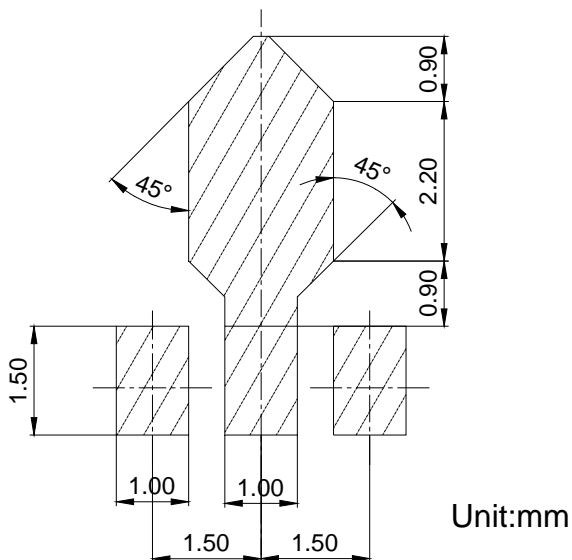
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SB806	SOT-89	1000/Tape&Reel