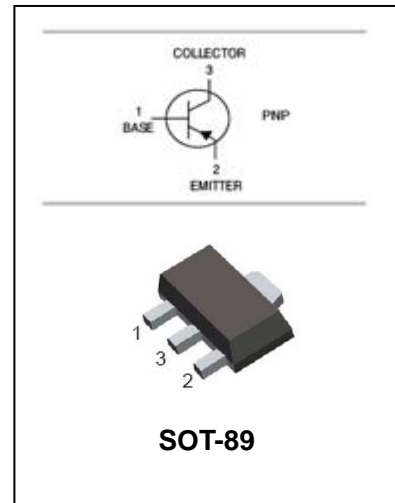


## PNP Epitaxial Planar Silicon Transistor

2SA1740

### FEATURES

- High breakdown voltage.
- Adoption of MBIT process.
- Excellent  $h_{FE}$  linearity.



### ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1740	AK	SOT-89

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

Symbol	Parameter	Value	Units
$V_{CBO}$	Collector-Base Voltage	-400	V
$V_{CEO}$	Collector-Emitter Voltage	-400	V
$V_{EBO}$	Emitter-Base Voltage	-5	V
$I_C$	Collector Current	-200	mA
$I_{CP}$	Collector Current(Pulse)	-400	mA
$P_C$	Collector Dissipation (Note1)	1.3	W
$T_j, T_{stg}$	Junction and Storage Temperature	-55~150	$^{\circ}\text{C}$

Note1: Mounted on ceramic substrate( $250\text{mm}^2 \times 0.8\text{t}$ )

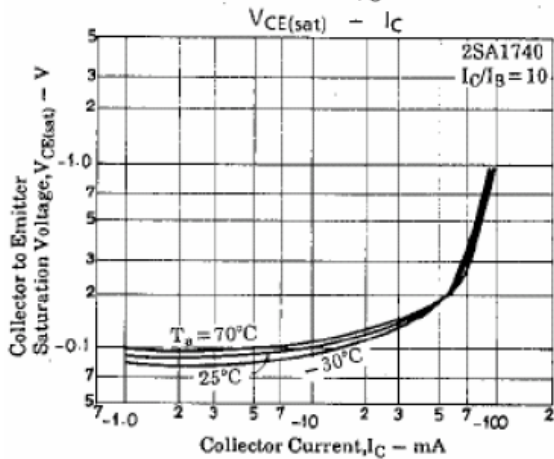
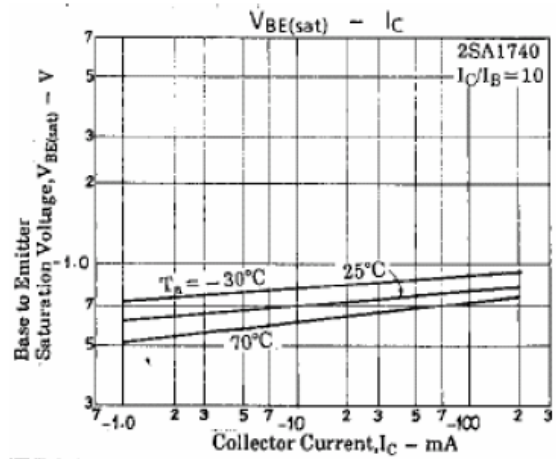
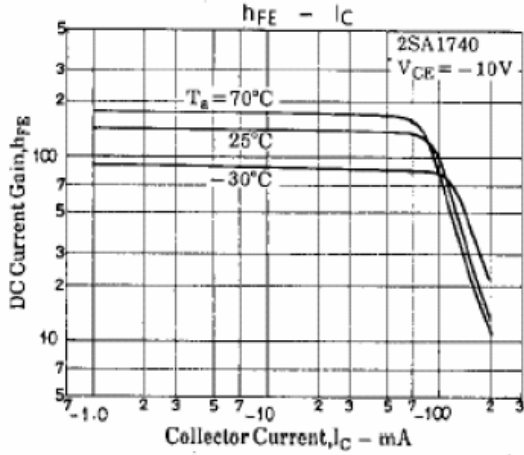
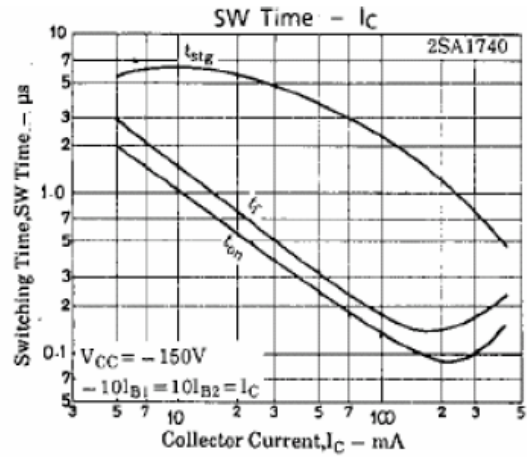
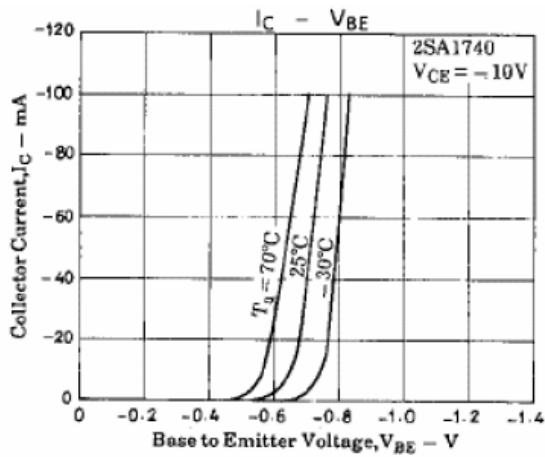
**PNP Epitaxial Planar Silicon Transistor****2SA1740****ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-10\mu A, I_E=0$	-400			V
Collector- emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10mA, I_B=0$	-400			V
Emitter- base breakdown voltage	$V_{(BR)EBO}$	$I_E=-10\mu A, I_C=0$	-5			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=-300V, I_E=0$			-0.1	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=-4V, I_C=0$			-0.1	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=-10V, I_C=-50mA$	60		200	
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-50mA, I_B=-5mA$			-1	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-50mA, I_B=-5mA$		-0.8		V
Transition frequency	$f_T$	$V_{CE}=-30V, I_C=-10mA$		70		MHz
Output capacitance	$C_{ob}$	$V_{CB}=-30V, I_E=0, f=1MHz$		4		pF
Reverse Transfer Capacitance	$C_{re}$	$V_{CB}=-30V, I_E=0, f=1MHz$		3		pF
Turn-ON Time	$t_{on}$	$V_{CC}=-150V, I_C=-50mA,$		0.25		$\mu S$
Turn-OFF Time	$t_{off}$	$I_{B1}=I_{B2}=-5mA$		5		$\mu S$

## PNP Epitaxial Planar Silicon Transistor

## 2SA1740

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



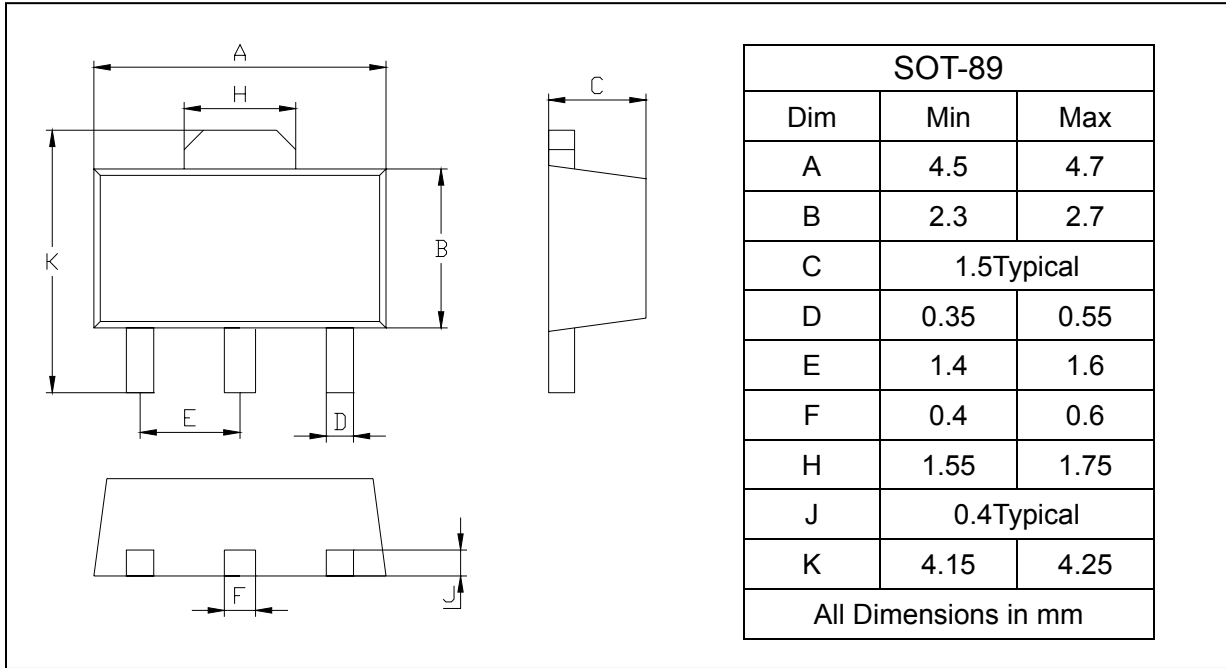
## PNP Epitaxial Planar Silicon Transistor

2SA1740

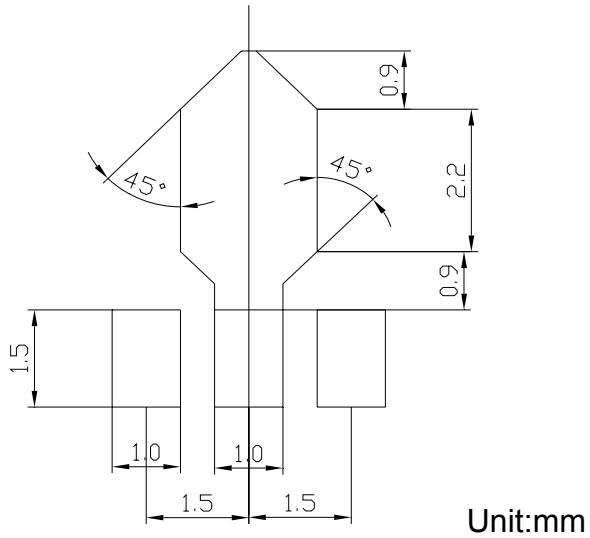
### PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

Device	Package	Shipping
2SA1740	SOT-89	1000/Tape&Reel

[www.s-manuals.com](http://www.s-manuals.com)