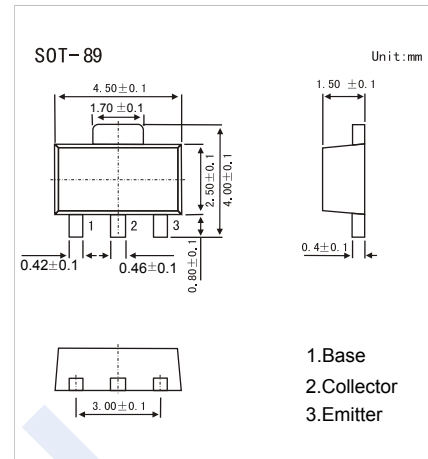


## PNP Transistors

### 2SA1735

#### ■ Features

- Low saturation voltage
- High speed switching time
- Small flat package
- PC = 1.0 to 2.0 W (mounted on a ceramic substrate)
- Complementary to 2SC4540



#### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V <sub>CB0</sub>	-60	V
Collector - Emitter Voltage	V <sub>CE0</sub>	-50	
Emitter - Base Voltage	V <sub>EB0</sub>	-6	
Collector Current - Continuous	I <sub>c</sub>	-1	A
Base Current	I <sub>B</sub>	-0.2	
Collector Power Dissipation (Note.1)	P <sub>c</sub>	0.5 1	W
Junction Temperature	T <sub>J</sub>	150	
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

Note.1: Mounted on ceramic board (250mm<sup>2</sup> X 0.8mm)

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V <sub>CB0</sub>	I <sub>c</sub> = -1 mA, I <sub>E</sub> =0	-60			V
Collector-emitter breakdown voltage	V <sub>CE0</sub>	I <sub>c</sub> = -10 mA, I <sub>B</sub> = 0	-50			
Emitter - base breakdown voltage	V <sub>EB0</sub>	I <sub>E</sub> = -1 mA, I <sub>c</sub> =0	-6			
Collector-base cut-off current	I <sub>CB0</sub>	V <sub>CB</sub> = -60 V, I <sub>E</sub> =0			-0.1	uA
Emitter cut-off current	I <sub>EB0</sub>	V <sub>EB</sub> = -6V, I <sub>c</sub> =0			-0.1	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>c</sub> =-500 mA, I <sub>B</sub> =-25 mA			-0.5	V
Base - emitter saturation voltage	V <sub>BE(sat)</sub>	I <sub>c</sub> =-500 mA, I <sub>B</sub> =-25 mA			-1.2	
DC current gain	h <sub>FE(1)</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -100 mA	120		400	
	h <sub>FE(2)</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -700 mA	40			
Turn-on Time	t <sub>on</sub>	See specified Test Circuit		0.1		us
Storage time	t <sub>stg</sub>			0.25		
Fall time	t <sub>f</sub>			0.1		
Collector output capacitance	C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz		16		pF
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> = -2V, I <sub>c</sub> = -100 mA		100		MHz

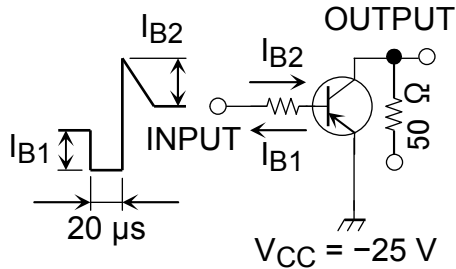
#### ■ Marking

Marking	L°C
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### PNP Transistors

### 2SA1735

#### Switching Time Test Circuit



$I_{B1} = 25 \text{ mA}, I_{B2} = 25 \text{ mA}$   
 DUTY CYCLE  $\leq 1\%$

#### Typical Characteristics

