### **Bipolar Transistor**



勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

### RoHS **Compliant**





## Collector Emitter

### **Description:**

A Silicon epitaxial PNP planer transistor in a TO-39 type package designed for use as drivers for high transistors in general purpose amplifier and switching circuits.

## Maximum Ratings:

Characteristic	Symbol	Rating	Unit	
Collector Emitter Voltage	V <sub>CEO</sub>	MITH AND	W.100Y.	
Collector Base Voltage	$(I_E = 0), V_{CBO}$	100 W	100 V	
Emitter Base Voltage	$(I_C = 0), V_{EBO}$	4	W 1100Y.CO	
Collector Current	II <sub>C</sub>	MIN	A	
Base Current	N <sub>B</sub>	500	mA	
Total Device Dissipation	$(T_C = +25^{\circ}C), P_{tot}$	10\\	MMM	
Total Device Dissipation	$(T_A = +25^{\circ}C), P_{tot}$	Y.CON 1 TW	WWWV	
Operating Junction Temperature,	T <sub>J</sub> T <sub>J</sub> WW. I	+200	°C 10	
Storage Temperature Range,	T <sub>stg</sub>	-65 to +200	MMAIN	
Thermal Resistance, Junction-to-Case,	R <sub>thJC</sub>	17.4	°C/W	
Thermal Resistance, Junction-to-Ambient,	R <sub>thJA</sub>	175	°C/W°C	

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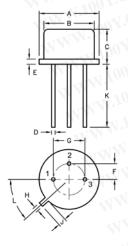
# Bipolar Transistor



## Electrical Characteristics: T<sub>A</sub> = +25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Max	Unit
COM. TAN MANA.	I <sub>CBO</sub>	$I_{CBO}$ $V_{CB} = 100V, I_{E} = 0$		1	
Collector Cutoff Current	$I_{CEO}$ $V_{CE} = 70V$ , $I_{B} = 0$		W	10	μA
Collector Cutoff Current	I <sub>CEV</sub>	$V_{CE} = 100V, V_{BE} = -1.5V$	LTW	1	
D. COM.TW	00 r. COJ	$V_{CE} = 100V, V_{BE} = -1.5V, T_{C} = +150^{\circ}C$			mA
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{EB} = 4V, I_C = 0$			μΑ
Collector-Emitter Sustaining Voltage	V <sub>CEO(SUS)</sub>	$I_{\rm C} = 10 {\rm mA}, I_{\rm B} = 0, {\rm Note } 1$	100	-	
Collector-Emitter Saturation Voltage	V <sub>CE(Sat)</sub>	I <sub>C</sub> = 250mA, I <sub>B</sub> = 25mA, Note 1	MITW	0.6	]
	OE(Gat)	$I_{\rm C} = 500  \text{mA}, I_{\rm B} = 50  \text{mA}, \text{ Note 1}$	VT	1	٧
	111.100	I <sub>C</sub> = 1A, I <sub>B</sub> = 200mA, Note1	OMP	<b>1</b> 2	
Base-Emitter Voltage	V <sub>BE(on)</sub>	$V_{CE} = 2V, I_{C} = 250 \text{mA}$	$CO_{M^{-1}}$	- 1	]
DO 1003.	h <sub>FE</sub>	I <sub>C</sub> = 250mA, V <sub>CE</sub> = 2V, Note 1	40	150	
DC Current Gain	N 10	I <sub>C</sub> = 1A, V <sub>CE</sub> = 2V, Note 1	5	1.	
Transition Frequency	f <sub>T</sub>	V <sub>CE</sub> = 10V, I <sub>C</sub> = 100mA, f = 10MHz	30	LIN	MHz
Collector-Base Capacitance	C <sub>cbo</sub>	$V_{CB} = 20V, I_{E} = 0, f = 1MHz$	101.	50	pF
Small-Signal Current Gain	h <sub>fe</sub>	$V_{CE} = 1.5V, I_{C} = 200 \text{mA}, f = 1 \text{kHz}$	40	WITT	

### Note:



Dimensions	A .	В	C	D	<b>E</b>	F	G	. H <sup>O</sup>	7CO	K	L
Min.	8.5	7.74	6.09	0.4	· -	2.41	4.82	0.71	0.73	12.7	42°
Max.	9.39	8.5	6.6	0.53	0.88	2.66	5.33	0.86	1.02	a TN	48°

**Dimensions: Millimetres** 

#### Pin Configuration:

- 1. Emitter
- 2. Base
- 3. Collector

### Part Number Table

Description	Part Number				
Transistor, PNP, 1A, 100V, TO-39	2N5679				

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Page <2>