

# SLA6050

**Silicon NPN Triple Diffused Planar Darlington****Silicon PNP Epitaxial Planar Darlington****Maximum Ratings**

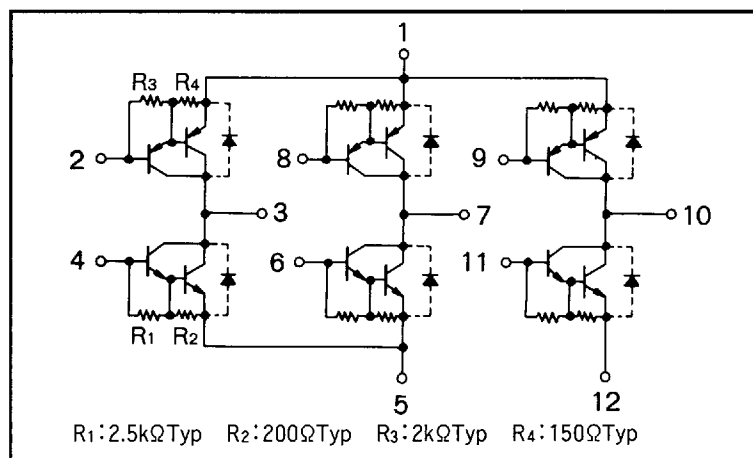
(Ta=25°C)

Item	Symbol	NPN	PNP	Unit
Collector-to-Base Voltage	V <sub>CBO</sub>	100	-60	V
Collector-to-Emitter Voltage	V <sub>CEO</sub>	100	-60	V
Emitter-to-Base Voltage	V <sub>EBO</sub>	6	-6	V
Collector Current	I <sub>C</sub>	5	-4	A
Base Current	I <sub>B</sub>	0.5	-0.5	A
Total Power Dissipation	P <sub>T</sub>	5 (Ta=25°C)		W
		25 (Tc=25°C)		
Storage Temperature	T <sub>stg</sub>	-40~+150		°C

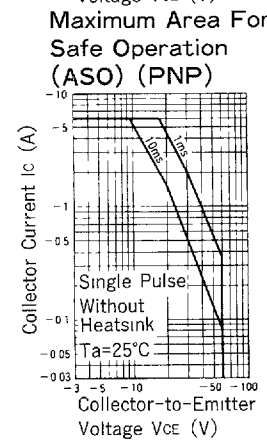
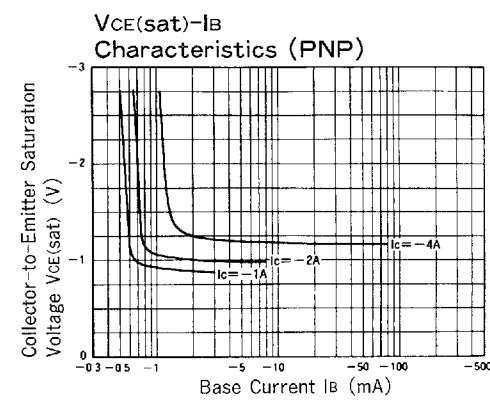
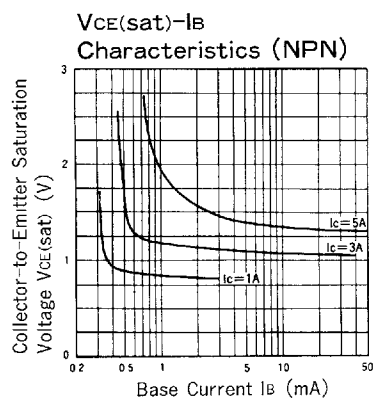
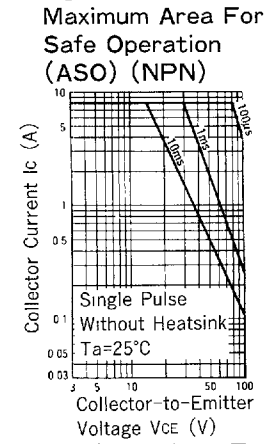
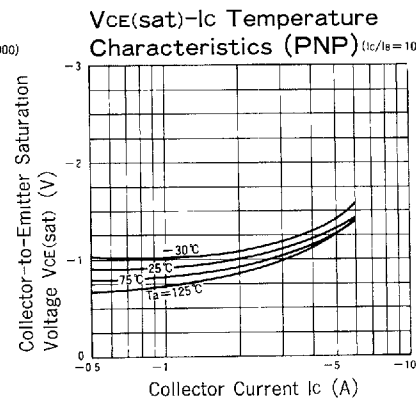
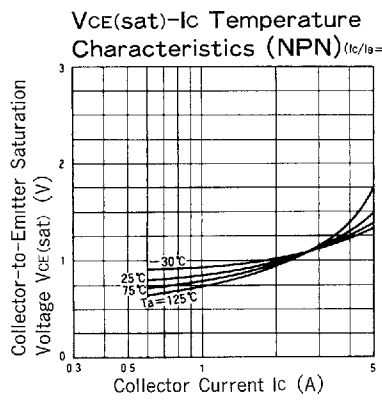
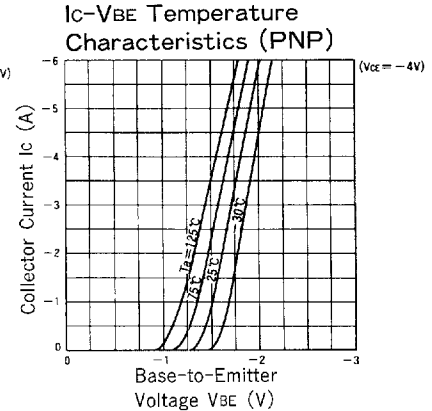
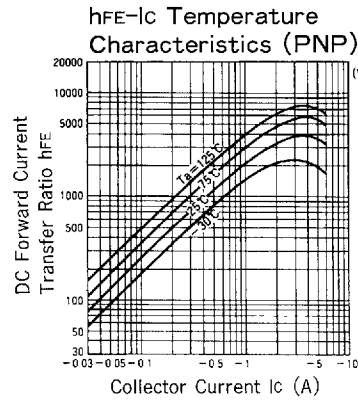
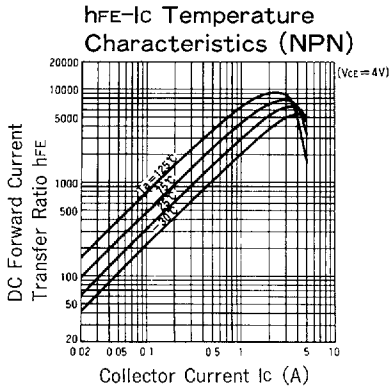
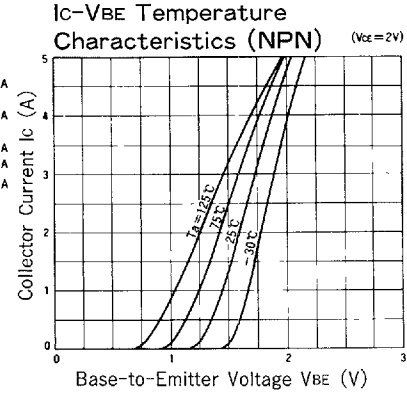
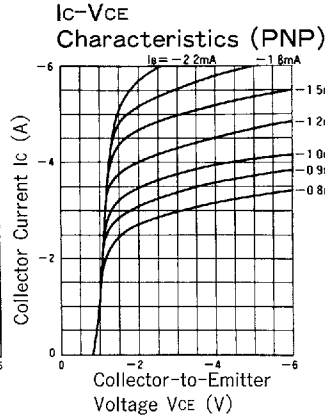
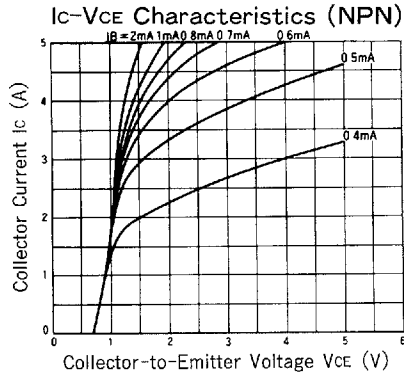
**Electrical Characteristics**

(Ta=25°C)

Item	Symbol	NPN	PNP
Collector Cut-off Current	I <sub>CBO</sub>	10μAmax (V <sub>CB</sub> =100V)	-10μAmax (V <sub>CB</sub> =-60V)
Emitter Cut-off Current	I <sub>EBO</sub>	10mAmax (V <sub>EB</sub> =6V)	-10mAmax (V <sub>EB</sub> =-6V)
Collector-to-Emitter Voltage	V <sub>CEO</sub>	100Vmin (I <sub>C</sub> =10mA)	-60Vmin (I <sub>C</sub> =-10mA)
DC Forward Current Transfer Ratio	h <sub>FE</sub>	2000min (V <sub>CE</sub> =4V, I <sub>C</sub> =3A)	2000min (V <sub>CE</sub> =-4V, I <sub>C</sub> =-3A)
Collector-to-Emitter Saturation Voltage	V <sub>CEsat</sub>	1.5Vmax (I <sub>C</sub> =3A, I <sub>B</sub> =6mA)	-1.5Vmax (I <sub>C</sub> =-3A, I <sub>B</sub> =-6mA)

**Equivalent Circuit Diagram**

### Characteristic Curves

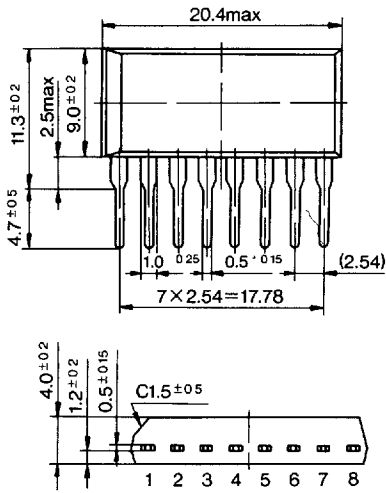


# Notes on using products

## Outline Drawings (Unit:in mm)

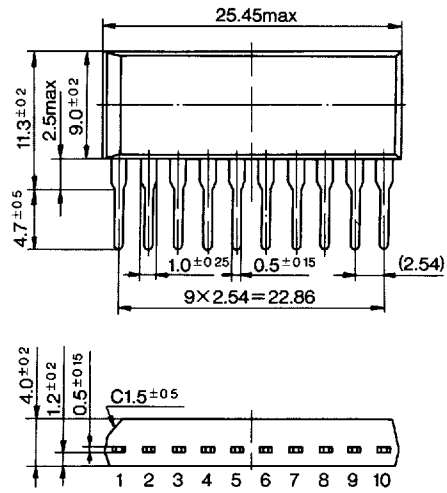
### STA Family

#### STA300 Series



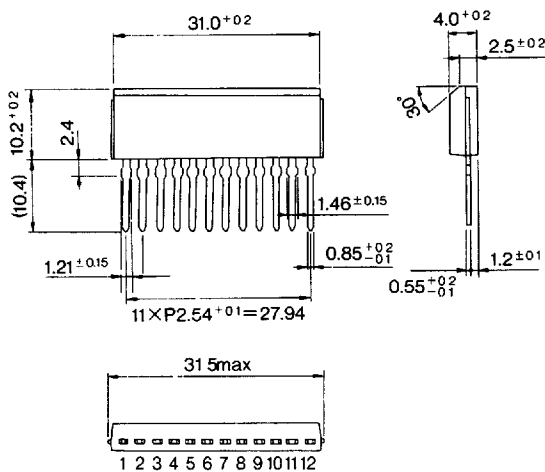
Weight Approx. 2.0g

#### STA400 Series



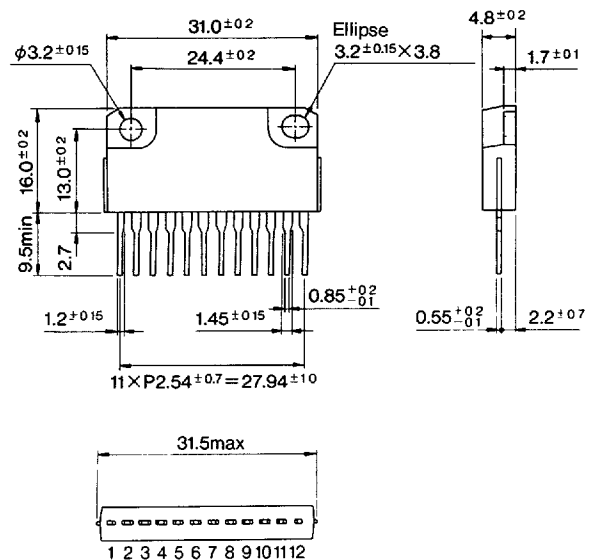
Weight Approx. 2.6g

### SMA Family



Weight Approx. 4.0g

### SLA Family



Weight Approx. 6.0g