

SLA6010

Silicon NPN Triple Diffused Planar Darlington Silicon PNP Epitaxial Planar Darlington

Maximum Ratings

(Ta=25°C)

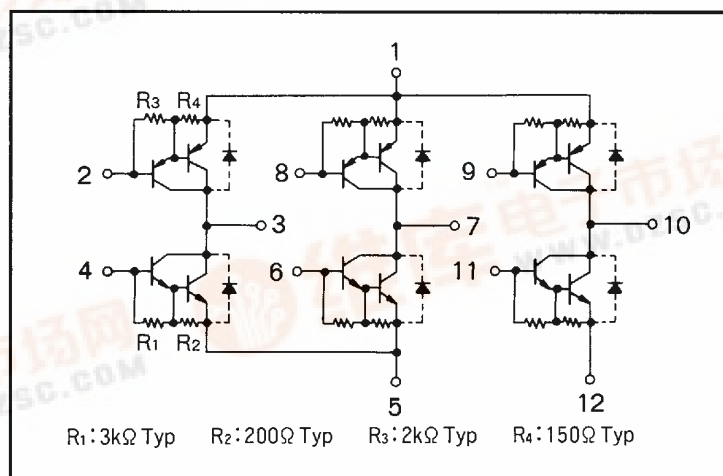
Item	Symbol	NPN	PNP	Unit
Collector-to-Base Voltage	V _{CB0}	60	-60	V
Collector-to-Emitter Voltage	V _{CE0}	60	-60	V
Emitter-to-Base Voltage	V _{EB0}	6	-6	V
Collector Current	I _c	4	-4	A
Collector Current	I _{cP}	6 (Pw ≤ 1ms, Du ≤ 50%)		A
Base Current	I _b	0.5	-0.5	A
Total Power Dissipation	P _T	5 (Ta = 25°C)		W
		25 (Tc = 25°C)		
Insulation Breakdown Voltage	V _{iso}	1000 (Between fin and lead pin, AC)		V _{rms}
Storage Temperature	T _{stg}	-40 ~ +150		°C
Thermal Resistance	θ _{j-c}	5		°C/W

Electrical Characteristics

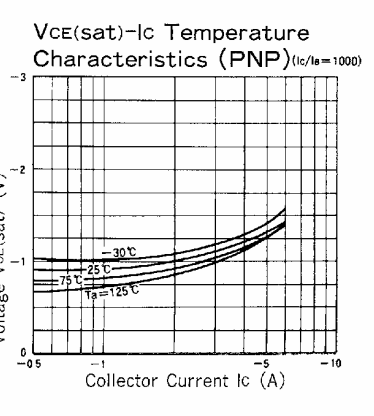
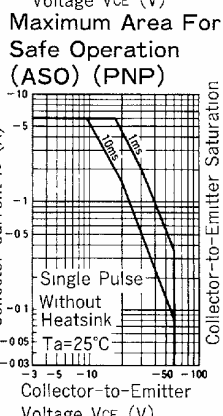
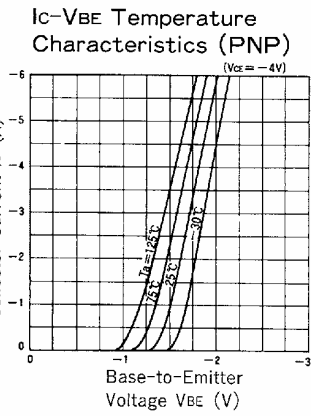
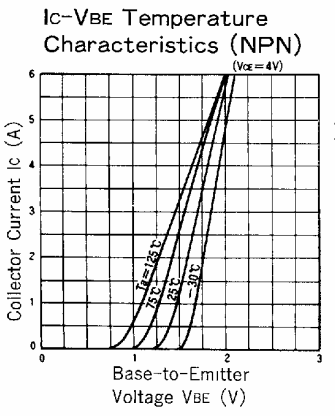
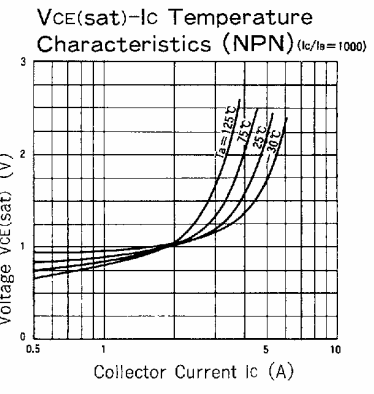
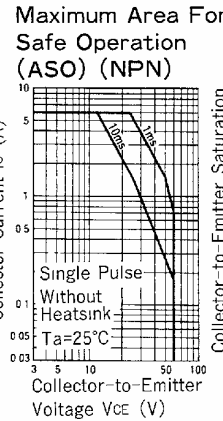
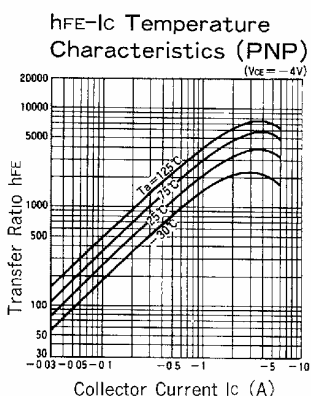
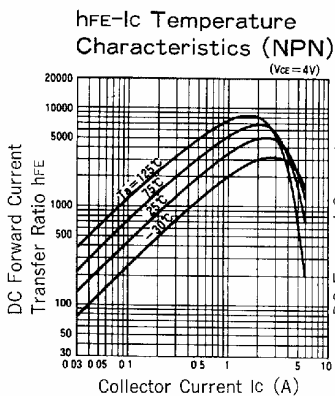
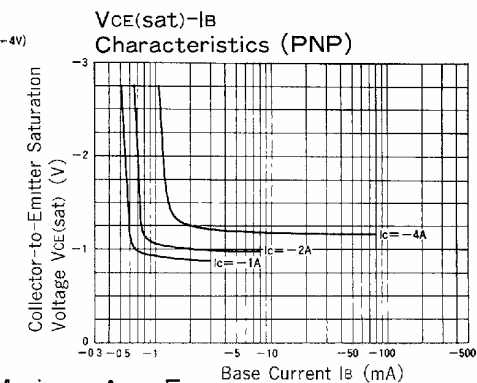
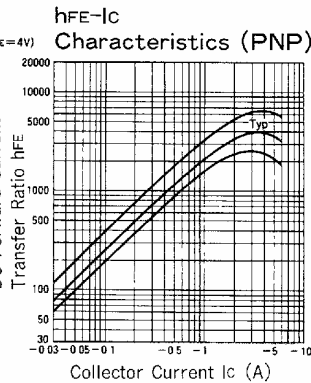
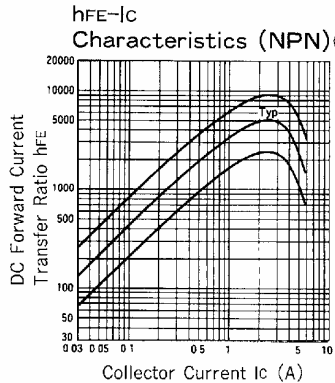
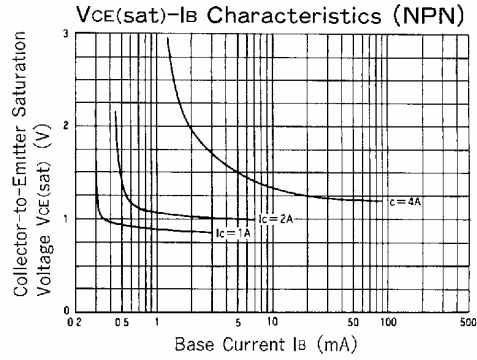
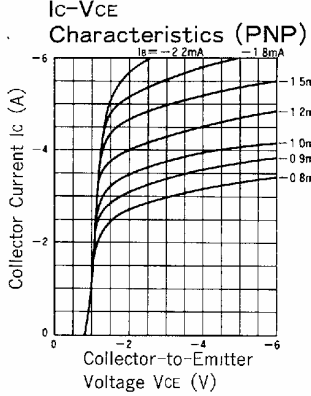
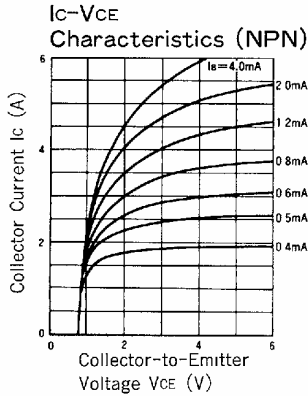
(Ta=25°C)

Item	Symbol	NPN	PNP
Collector Cut-off Current	I _{cBO}	10μA _{max} (V _{CB} = 60V)	-10μA _{max} (V _{CB} = -60V)
Emitter Cut-off Current	I _{eBO}	10mA _{max} (V _{EB} = 6V)	-10mA _{max} (V _{EB} = -6V)
Collector-to-Emitter Voltage	V _{CE0}	60V _{min} (I _c = 10mA)	-60V _{min} (I _c = -10mA)
DC Forward Current Transfer Ratio	h _{FE}	2000 _{min} (V _{CE} = 4V, I _c = 3A)	2000 _{min} (V _{CE} = -4V, I _c = -3A)
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	1.5V _{max} (I _c = 3A, I _b = 6mA)	-1.5V _{max} (I _c = -3A, I _b = -6mA)

Equivalent Circuit Diagram



Characteristic Curves

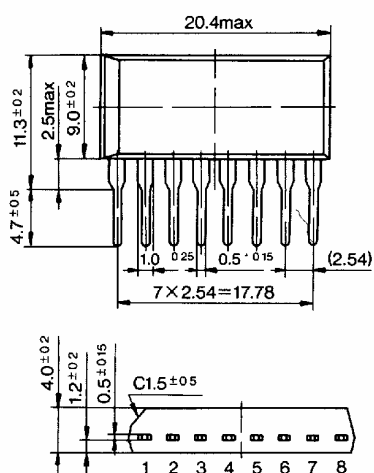


Notes on using products

Outline Drawings (Unit:in mm)

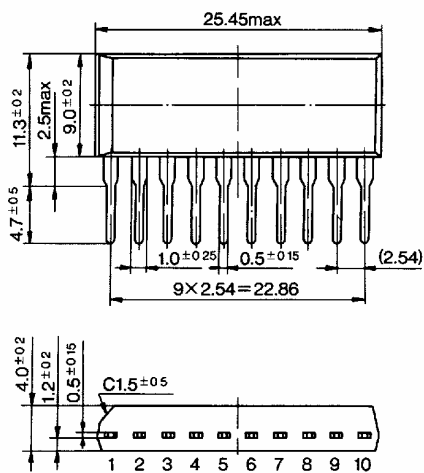
STA Family

STA300 Series



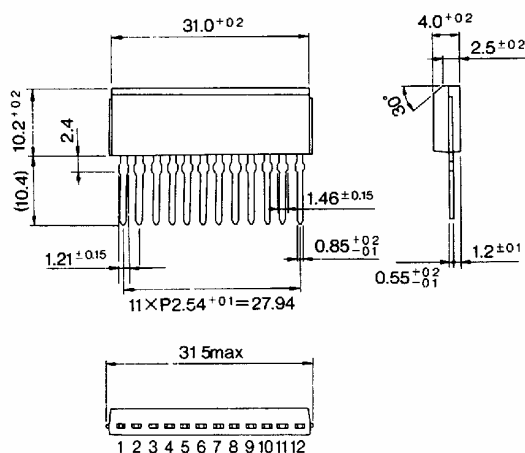
Weight Approx. 2.0g

STA400 Series



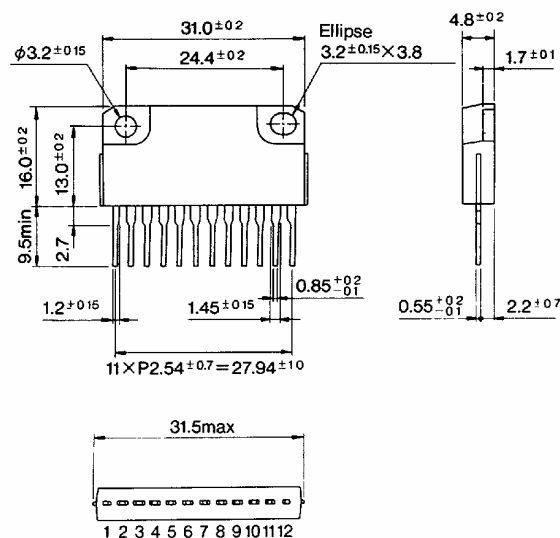
Weight Approx. 2.6g

SMA Family



Weight Approx. 4.0g

SLA Family



Weight Approx. 6.0g