

SMA6501

Silicon NPN, PNP Epitaxial Planar

Maximum Ratings

(Ta = 25°C)

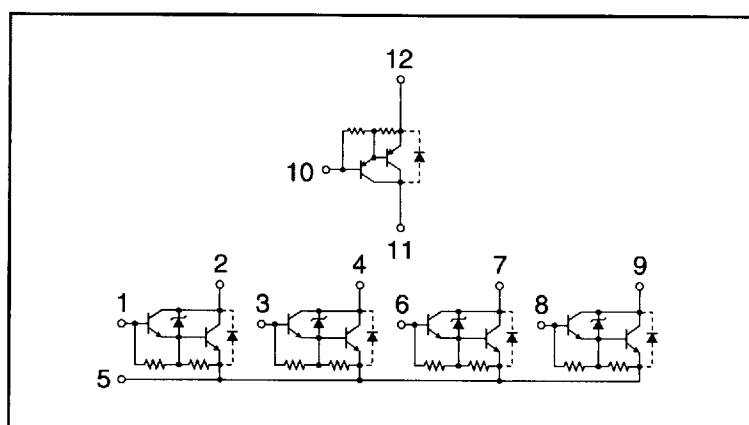
Item	Symbol	Ratings		Unit
		NPN	PNP	
Collector-to-Base Voltage	V _{CB0}	100 ± 15	-50	V
Collector-to-Emitter Voltage	V _{CE0}	100 ± 15	-50	V
Emitter-to-Base Voltage	V _{EB0}	6	-6	V
Collector Current	I _C	2	-4	A
Base Current	I _B	0.5	-0.5	A
Total Power Dissipation	P _T	4 (Ta = 25°C)		W
		20 (Tc = 25°C)		
Storage Temperature	T _{stg}	-40 ~ +150		°C

Electrical Characteristics

(Ta = 25°C)

Item	Symbol	Specification		Unit
		NPN	PNP	
Collector Cut-off Current	I _{CB0}	10max (V _{CB} = 85V)	-10max (V _{CB} = -50V)	μA
Emitter Cut-off Current	I _{EB0}	5max (V _{EB} = 6V)	-10max (V _{EB} = -6V)	mA
Collector-to-Emitter Voltage	V _{CE0}	100 ± 15min (I _C = 10mA)	-50min (I _C = -10mA)	V
DC Forward Current Transfer Ratio	h _{FE}	2000min (V _{CE} = 4V, I _C = 1A)	2000min (V _{CE} = -4V, I _C = -2A)	
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	1.5max (I _C = 1A, I _B = 2mA)	-1.5max (I _C = -2A, I _B = -4mA)	V

Equivalent Circuit Diagram

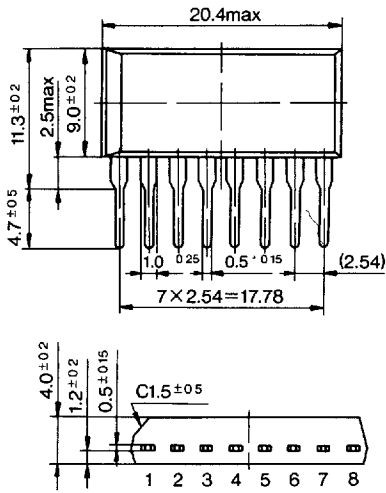


Notes on using products

Outline Drawings (Unit:in mm)

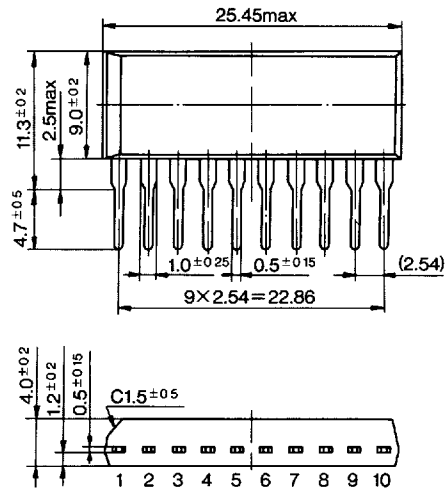
STA Family

STA300 Series



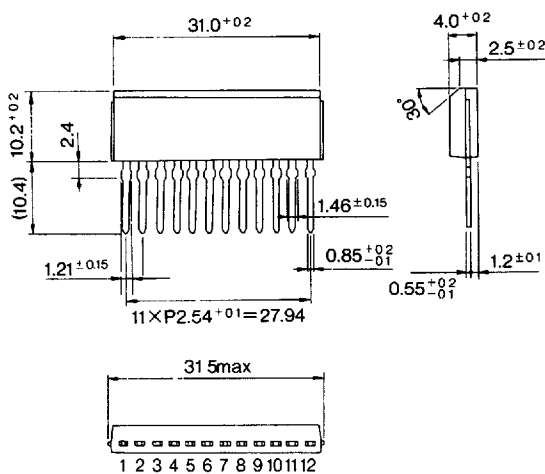
Weight Approx. 2.0g

STA400 Series



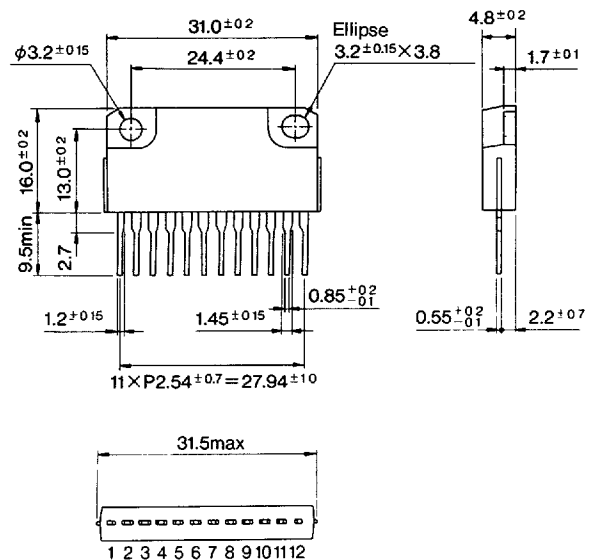
Weight Approx. 2.6g

SMA Family



Weight Approx. 4.0g

SLA Family



Weight Approx. 6.0g