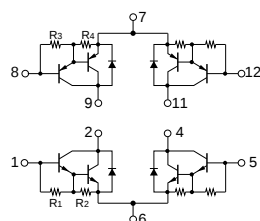


Absolute maximum ratings

(Ta=25°C)

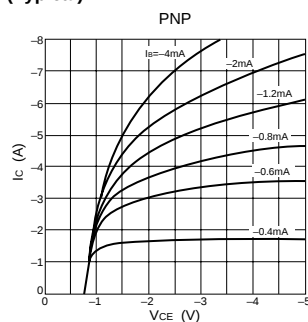
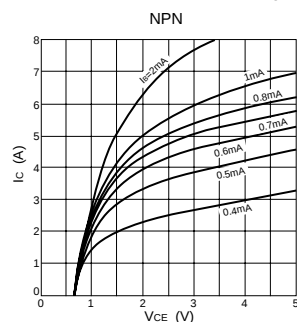
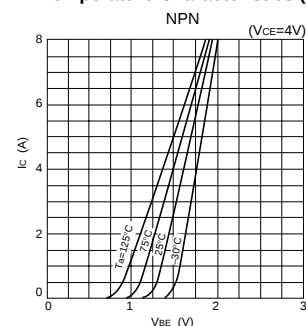
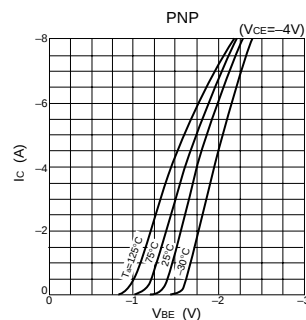
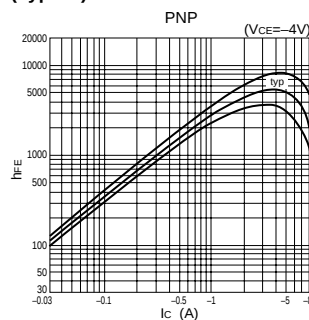
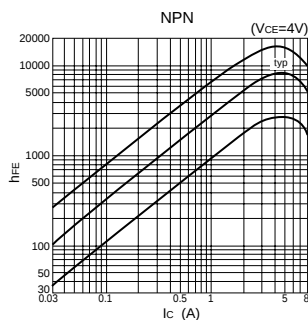
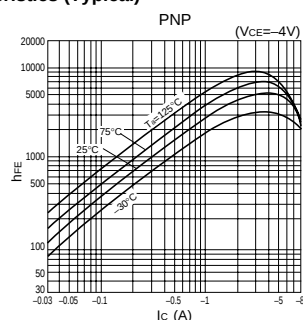
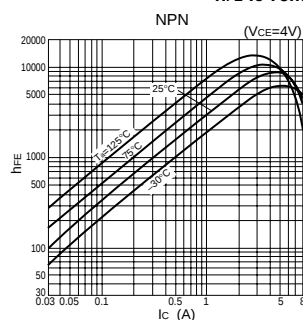
Symbol	Ratings		Unit
	NPN	PNP	
V _{CBO}	100	−100	V
V _{CEO}	100	−100	V
V _{EBO}	6	−6	V
I _C	5	−5	A
I _{CP}	8 (PW≤1ms, Du≤50%)	−8 (PW≤1ms, Du≤50%)	A
I _B	0.5	−0.5	A
P _T	5 (T _a =25°C)		W
	25 (T _c =25°C)		
V _{ISO}	1000 (Between fin and lead pin, AC)		V _{rms}
T _j	150		°C
T _{stg}	−40 to +150		°C
θ _{j-c}	5		°C/W

Equivalent circuit diagram



R1: 2.5kΩ typ R2: 200Ω typ R3: 3kΩ typ R4: 100Ω typ

Characteristic curves

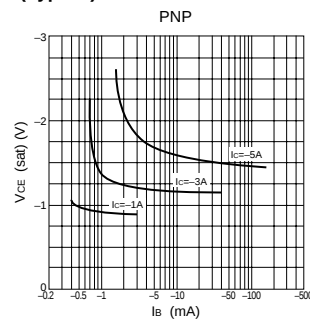
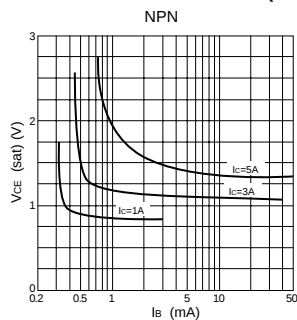
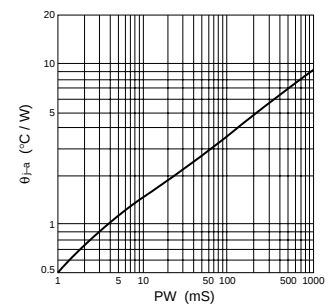
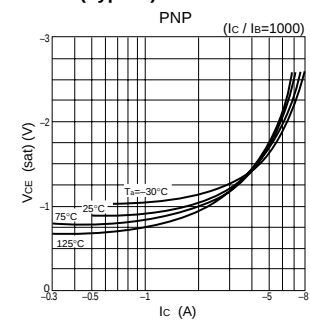
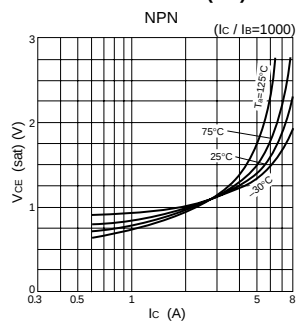
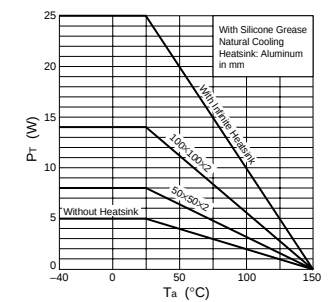
I_C-V_{CE} Characteristics (Typical)I_C-V_{BE} Temperature Characteristics (Typical)h_{FE}-I_C Characteristics (Typical)h_{FE}-I_C Temperature Characteristics (Typical)

Electrical characteristics

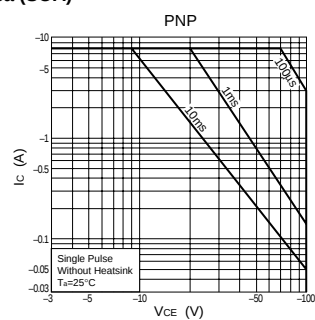
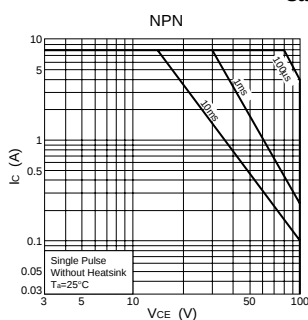
(T_a=25°C)

Symbol	NPN					PNP				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
I _{CBO}			10	μA	V _{CB} =100V			-10	μA	V _{CB} =-100V
I _{EBO}			10	mA	V _{EB} =6V			-10	mA	V _{EB} =-6V
V _{CEO}	100			V	I _C =10mA	-100			V	I _C =-10mA
h _{FE}	2000				V _{CE} =4V, I _C =3A	2000				V _{CE} =-4V, I _C =-3A
V _{CE(sat)}			1.5	V	I _C =3A, I _B =6mA			-1.5	V	I _C =-3A, I _B =-6mA

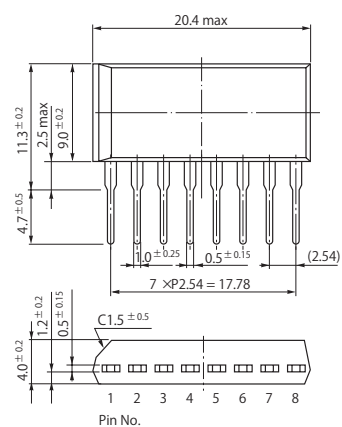
Characteristic curves

V_{CE(sat)}-I_B Characteristics (Typical)θ_{JA}-PW CharacteristicsV_{CE(sat)}-I_C Temperature Characteristics (Typical)P_T-T_a Characteristics

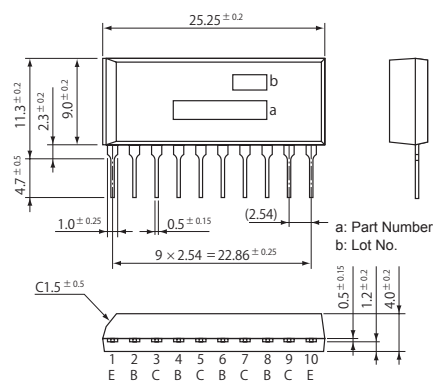
Safe Operating Area (SOA)



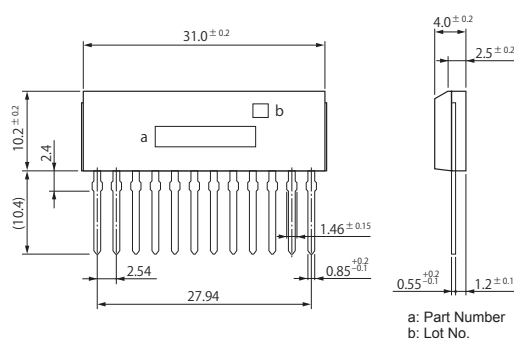
• SIP 8 (STA8Pin)



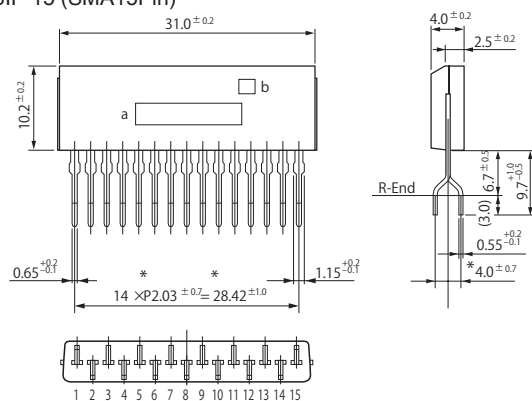
• SIP 10 (STA10Pin)



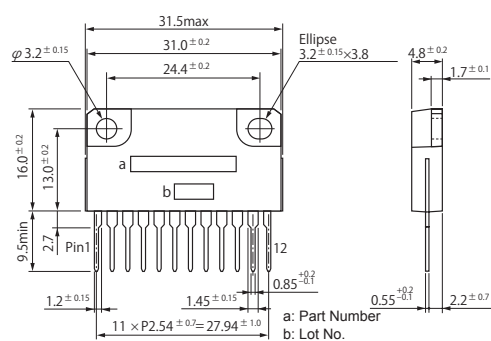
• SIP 12 (SMA12Pin)



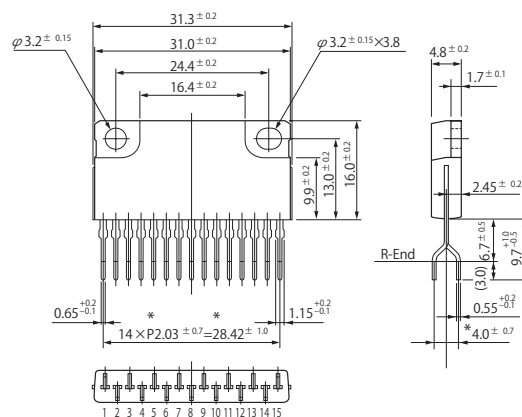
• SIP 15 (SMA15Pin)



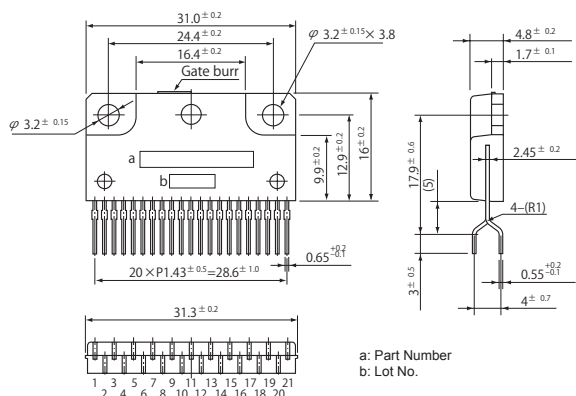
• SIP 12 with Fin (SLA12Pin)



• SIP 15 with Fin (SLA15Pin)



• SIP 21 with Fin (SLA21Pin)



(Unit:mm)