

Absolute maximum ratings

(T_a=25°C)

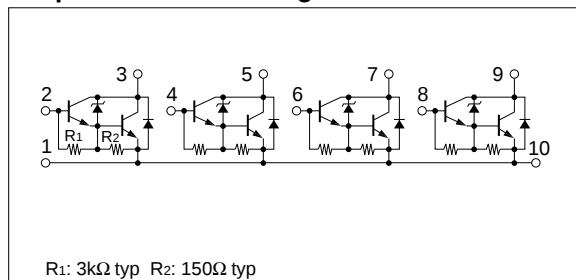
Symbol	Ratings	Unit
V _{CB0}	60±10	V
V _{CEO}	60±10	V
V _{EB0}	6	V
I _C	4	A
I _{CP}	8 (PW≤10ms, D _u ≤50%)	A
P _T	4 (T _a =25°C) 20 (T _c =25°C)	W
T _j	150	°C
T _{stg}	-40 to +150	°C

Electrical characteristics

(T_a=25°C)

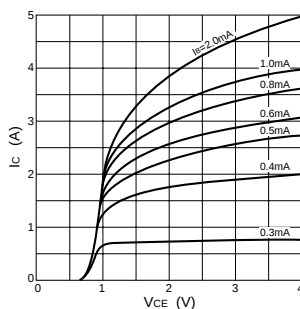
Symbol	Specification			Unit	Conditions
	min	typ	max		
I _{CB0}			100	μA	V _{CB} =50V
I _{EB0}			10	mA	V _{EB} =6V
V _{CEO}	50	60	70	V	I _C =10mA
h _{FE}	1000				V _{CE} =4V, I _C =3A
V _{CE(sat)}			2.0	V	I _C =3A, I _B =10mA
t _{on}		1.0		μs	V _{CC} ≐30V, I _C =3A, I _{B1} =-I _{B2} =10mA
t _{stg}		4.0		μs	
t _f		1.5		μs	

Equivalent circuit diagram

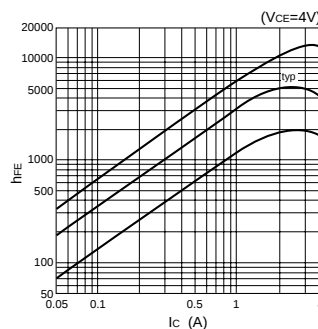


Characteristic curves

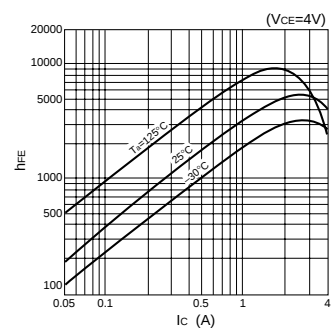
I_C-V_{CE} Characteristics (Typical)



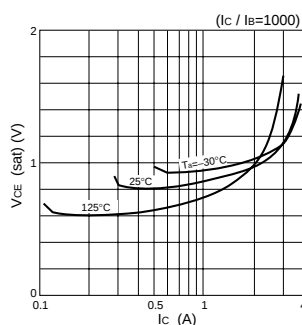
h_{FE}-I_C Characteristics (Typical)



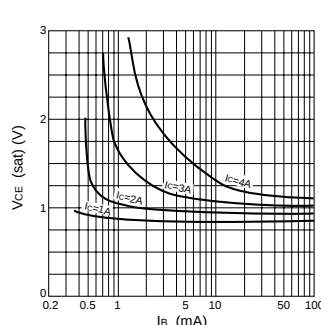
h_{FE}-I_C Temperature Characteristics (Typical)



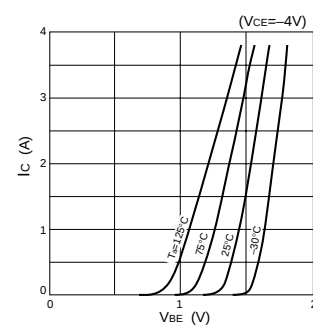
V_{CE(sat)}-I_C Temperature Characteristics (Typical)



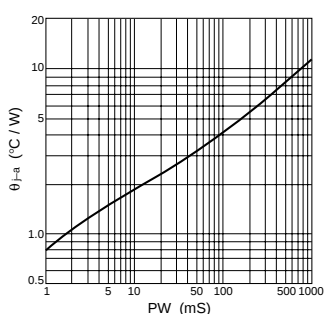
V_{CE(sat)}-I_B Characteristics (Typical)



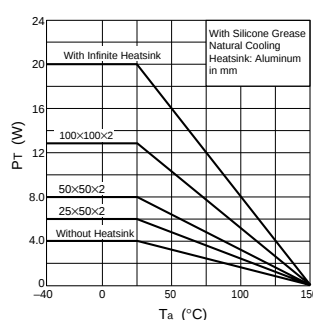
I_C-V_{BE} Temperature Characteristics (Typical)



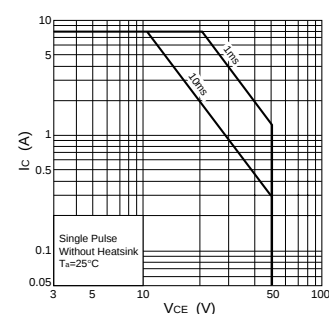
θ_{J-a}-PW Characteristics



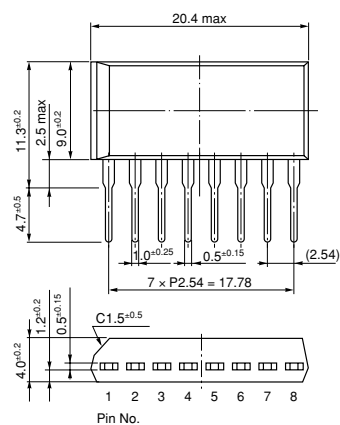
P_T-T_a Characteristics



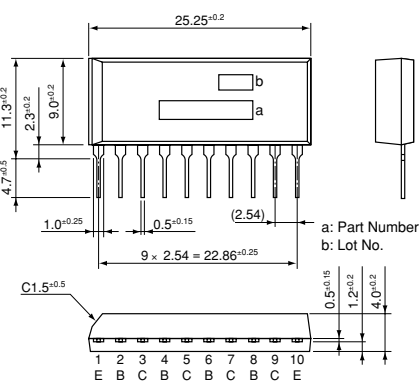
Safe Operating Area (SOA)



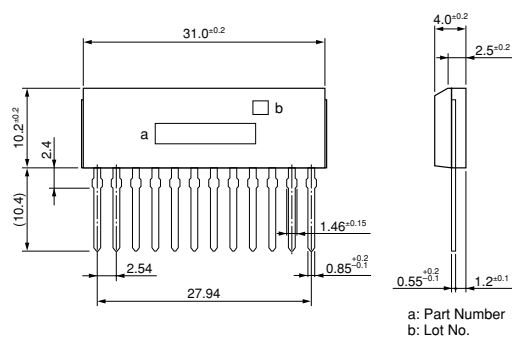
• SIP 8 (STA8Pin)



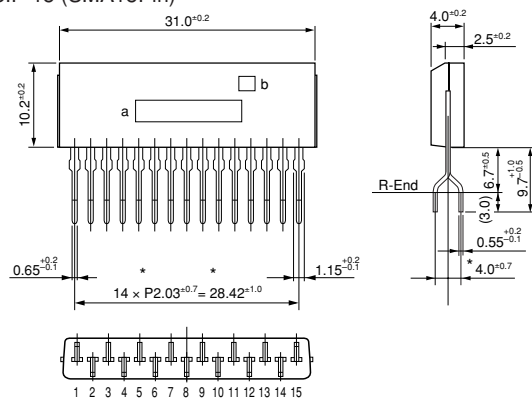
• SIP 10 (STA10Pin)



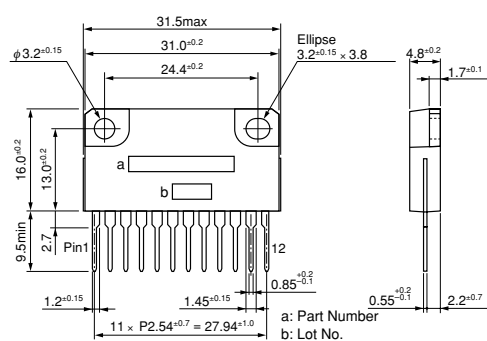
• SIP 12 (SMA12Pin)



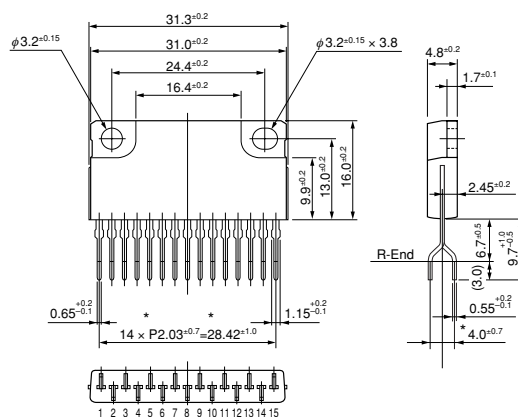
• SIP 15 (SMA15Pin)



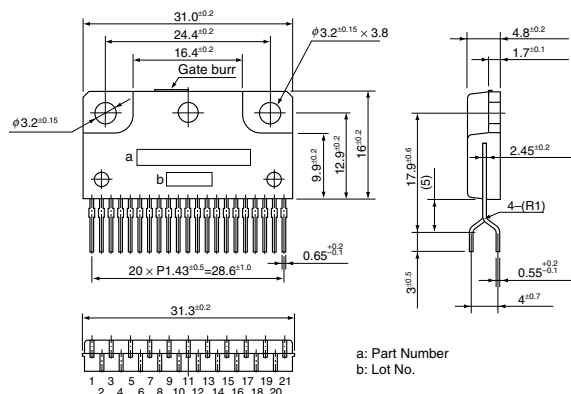
• SIP 12 with Fin (SLA12Pin)



• SIP 15 with Fin (SLA15Pin)



• SIP 15 with Fin (SLA15Pin)



(Unit:mm)