

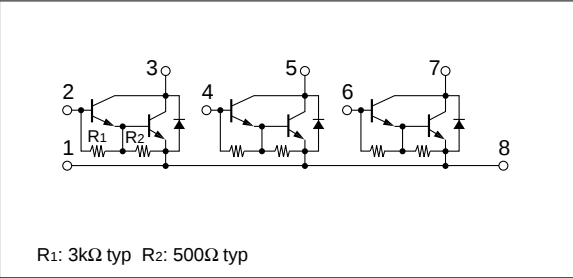
Absolute maximum ratings (Ta=25°C)

Symbol	Ratings	Unit
V _{CBO}	120	V
V _{CEO}	100	V
V _{EBO}	6	V
I _C	4	A
I _{CP}	8 (PW≤10ms, Du≤50%)	A
P _T	3 (Ta=25°C) 15 (Tc=25°C)	W
T _j	150	°C
T _{stg}	-40 to +150	°C

Electrical characteristics (Ta=25°C)

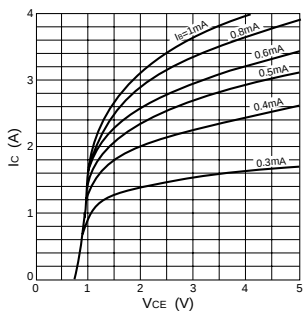
Symbol	Specification			Unit	Conditions
	min	typ	max		
I _{CBO}			100	μA	V _{CB} =120V
I _{EBO}			10	mA	V _{EB} =6V
V _{CEO}	100			V	I _C =10mA
h _{FE}	1000				V _{CE} =4V, I _C =2A
V _{CE(sat)}			2.0	V	I _C =2A, I _B =10mA
t _{on}		0.8		μs	V _{CC} ≐40V, I _C =2A, I _{B1} =-I _{B2} =10mA
t _{stg}		5.0		μs	
t _f		2.0		μs	

Equivalent circuit diagram

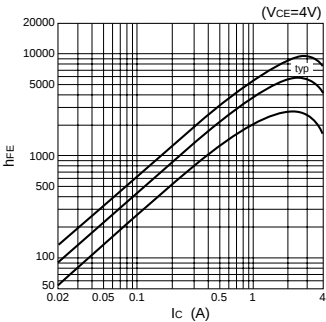


Characteristic curves

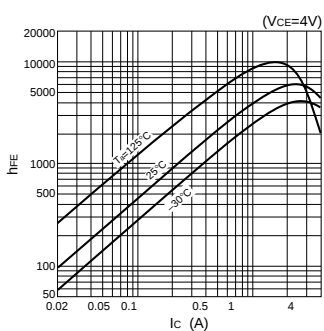
I_C-V_{CE} Characteristics (Typical)



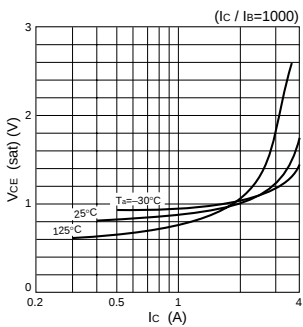
h_{FE}-I_C Characteristics (Typical)



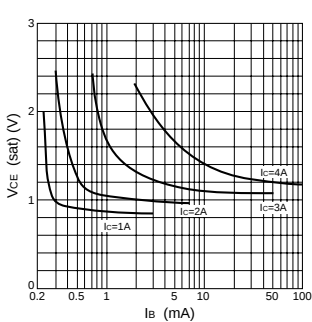
h_{FE}-I_C Temperature Characteristics (Typical)



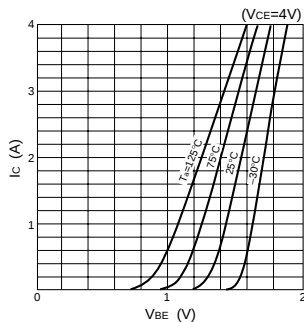
V_{CE(sat)}-I_C Temperature Characteristics (Typical)



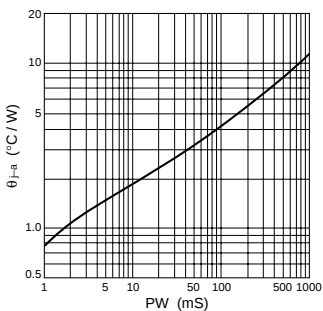
V_{CE(sat)}-I_B Characteristics (Typical)



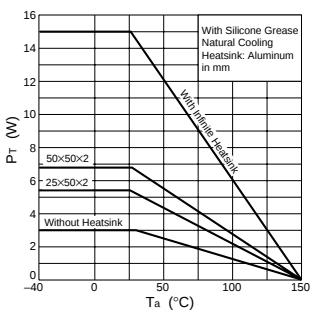
I_C-V_{BE} Temperature Characteristics (Typical)



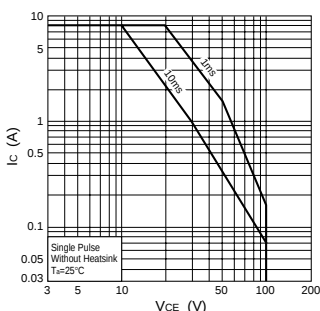
θ_{JA}-PW Characteristics



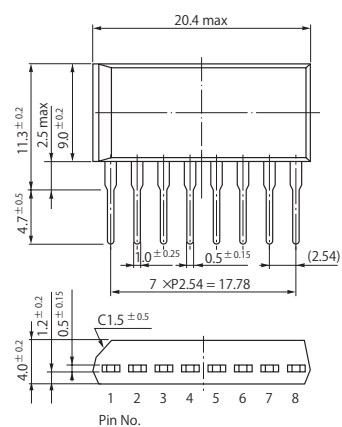
P_T-T_a Characteristics



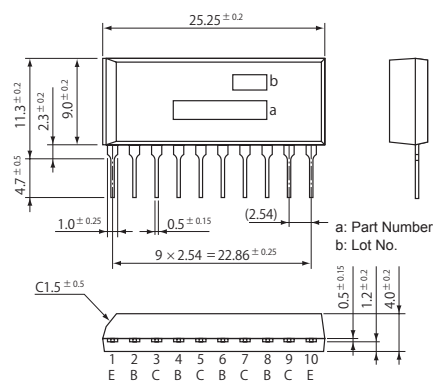
Safe Operating Area (SOA)



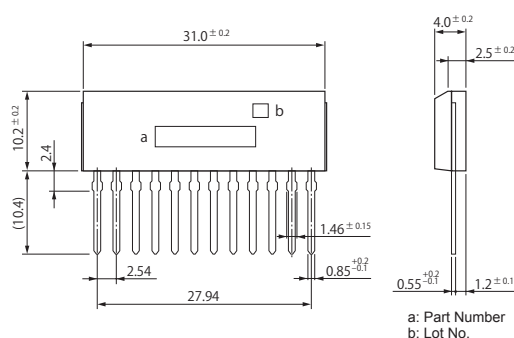
• SIP 8 (STA8Pin)



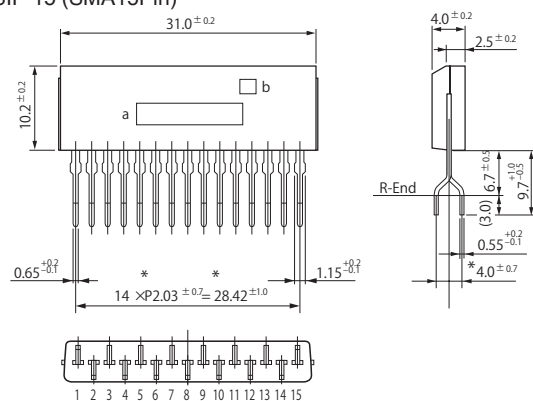
• SIP 10 (STA10Pin)



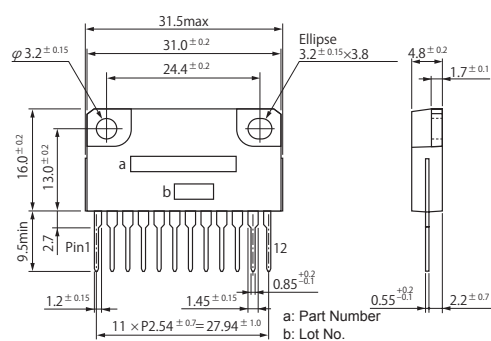
• SIP 12 (SMA12Pin)



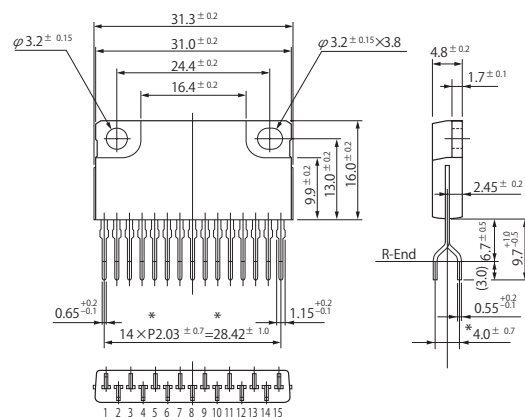
• SIP 15 (SMA15Pin)



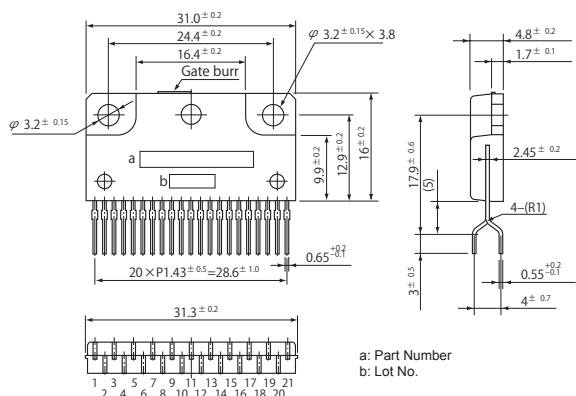
• SIP 12 with Fin (SLA12Pin)



• SIP 15 with Fin (SLA15Pin)



• SIP 21 with Fin (SLA21Pin)



(Unit:mm)