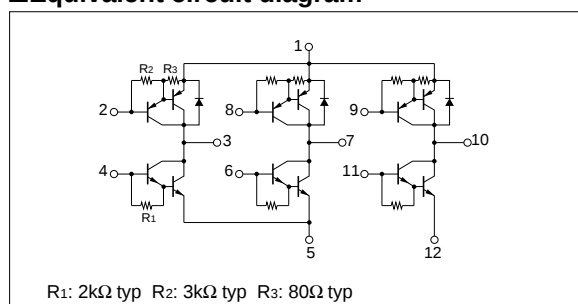


Absolute maximum ratings

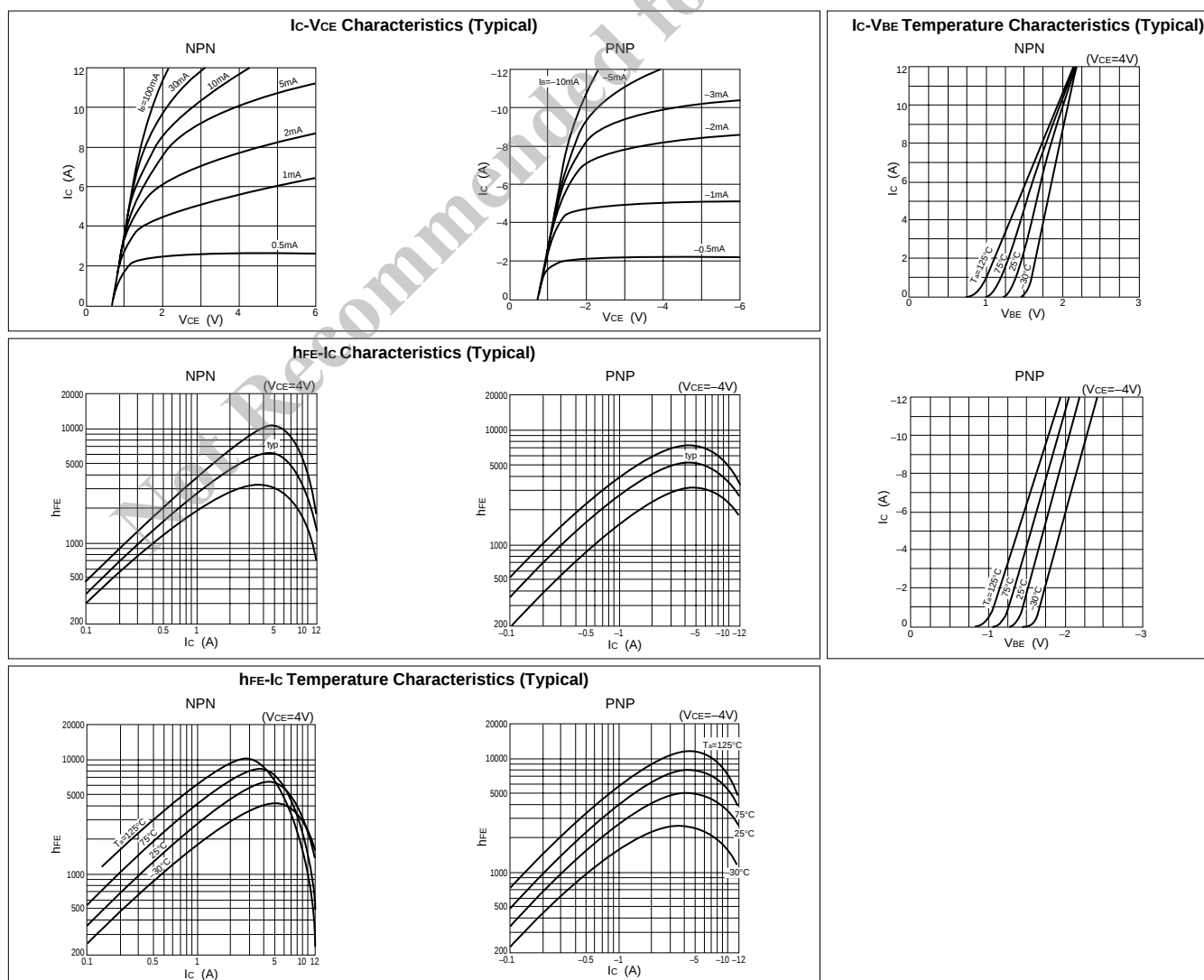
($T_a=25^\circ\text{C}$)

Symbol	Ratings		Unit
	NPN	PNP	
V _{CB0}	60	−60	V
V _{CE0}	60	−60	V
V _{EB0}	6	−6	V
I _C	6	−6	A
I _{CP}	12 (P _W ≤1ms, D _u ≤50%)	−12 (P _W ≤1ms, D _u ≤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



Characteristic curves

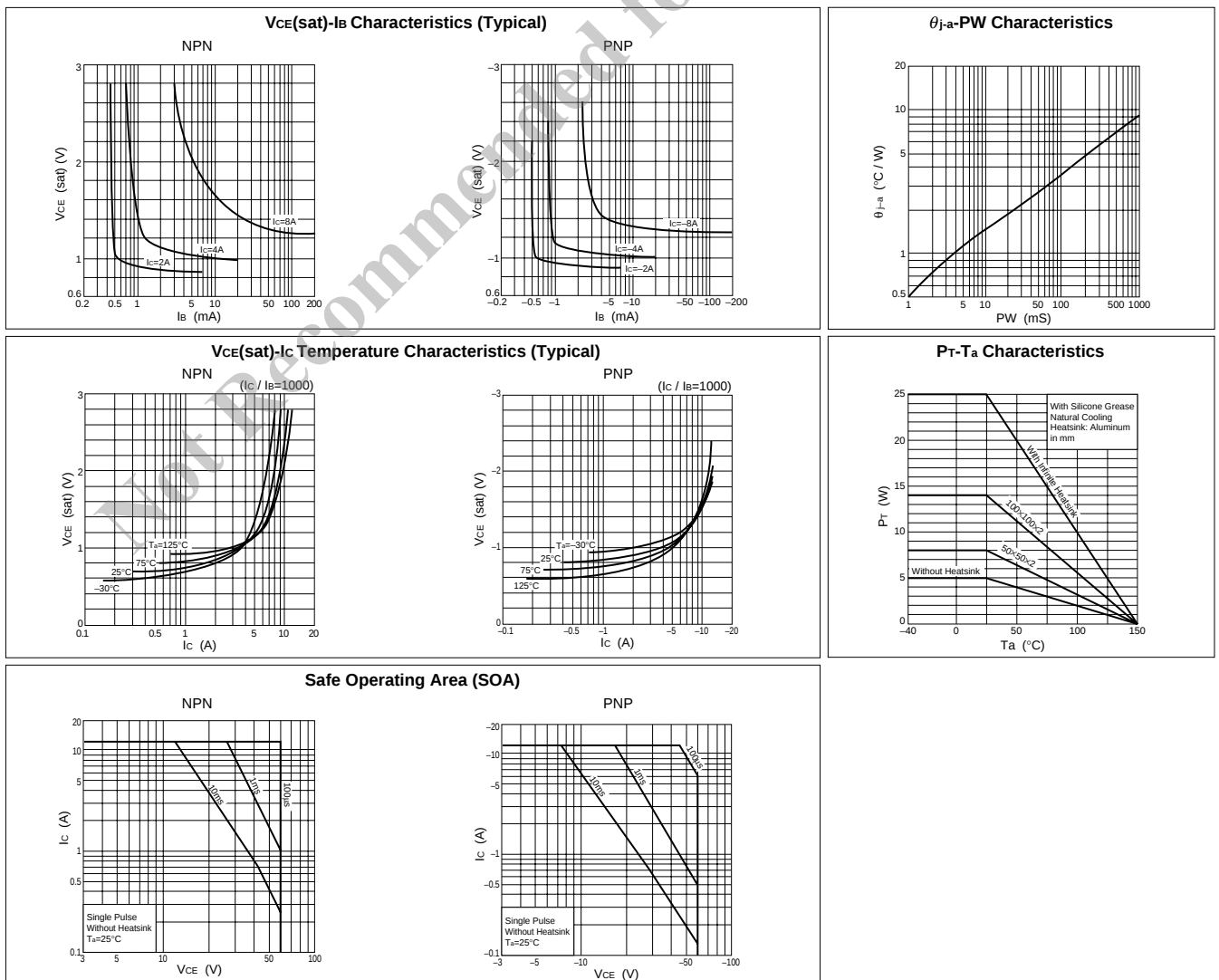


Electrical characteristics

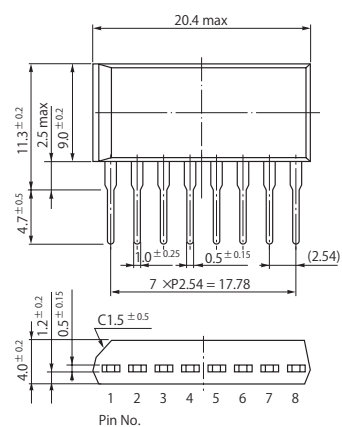
(Ta=25°C)

Symbol	NPN					PNP				
	Specification			Unit	Conditions	Specification			Unit	Conditions
	min	typ	max			min	typ	max		
ICBO			10	μA	V _{CB} =60V			−10	μA	V _{CB} =−60V
IEBO			10	μA	V _{EB} =6V			−10	mA	V _{EB} =−6V
V _{CEO}	60			V	I _C =25mA	−60			V	I _C =−25mA
h _{FE}	2000	5000	12000		V _{CE} =4V, I _C =5A	2000	5000	12000		V _{CE} =−4V, I _C =−5A
V _{CE} (sat)			1.5	V	I _C =5A, I _B =10mA			−1.5	V	I _C =−5A, I _B =−10mA
V _{BE} (sat)			2.0	V				−2.0	V	
V _{FEC}				V				2.0	V	
t _{rr}				μs			1.0		μs	I _{FEC} =±0.5A
t _{on}		0.8		μs	V _{CC} ≐25V, I _C =5A, I _{B1} =−I _{B2} =10mA		1.0		μs	V _{CC} ≐−25V, I _C =−5A, I _{B1} =−I _{B2} =−10mA
t _{stg}		6.0		μs			1.4		μs	
t _r		2.0		μs			0.6		μs	
f _T		80		MHz	V _{CE} =12V, I _E =−1A		120		MHz	V _{CE} =−12V, I _E =1A
C _{ob}		100		pF	V _{CB} =10V, f=1MHz		150		pF	V _{CB} =−10V, f=1MHz

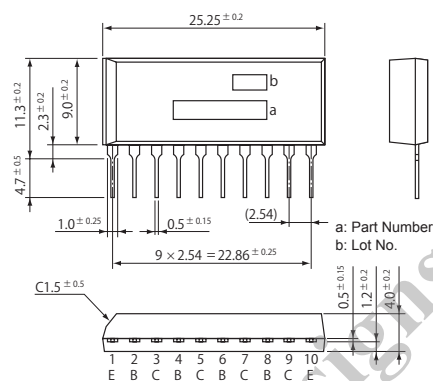
Characteristic curves



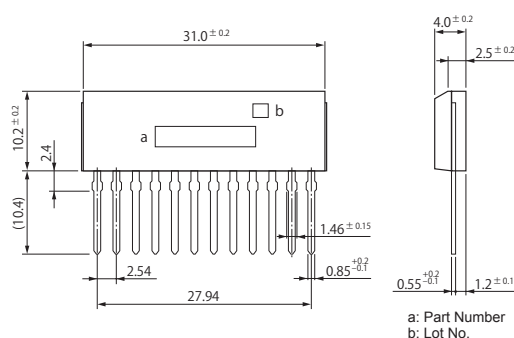
• SIP 8 (STA8Pin)



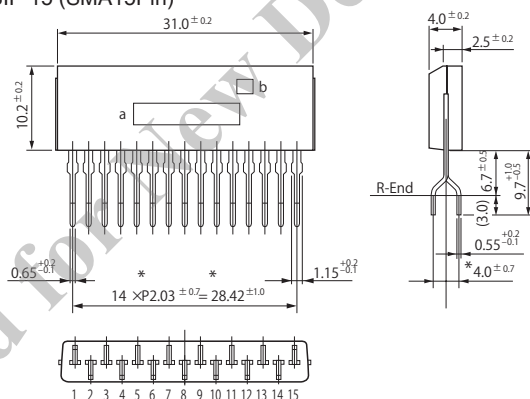
• SIP 10 (STA10Pin)



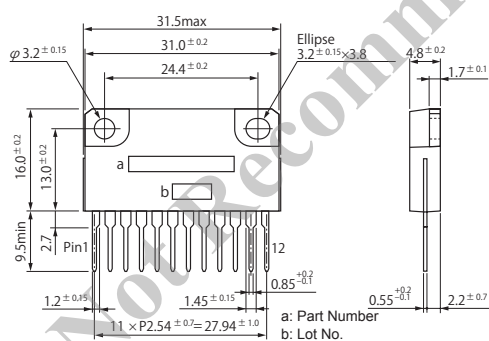
• SIP 12 (SMA12Pin)



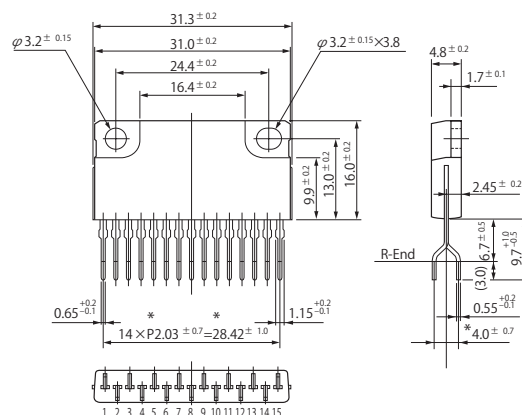
• SIP 15 (SMA15Pin)



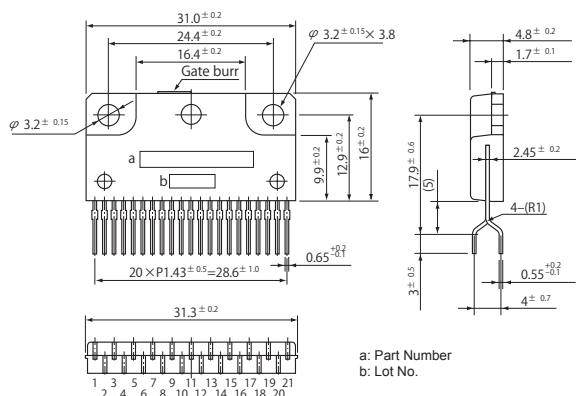
• SIP 12 with Fin (SLA12Pin)



• SIP 15 with Fin (SLA15Pin)



• SIP 21 with Fin (SLA21Pin)



(Unit:mm)