

# STA471A

NPN ダーリントン  
アバランシェダイオード内蔵

外形図©...STA(10 pin)

## 絶対最大定格

( $T_a = 25$ )

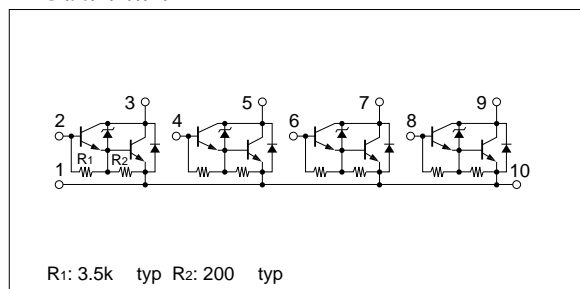
記号	定格	単位
$V_{CB0}$	$60 \pm 10$	V
$V_{CEO}$	$60 \pm 10$	V
$V_{EBO}$	6	V
$I_c$	2	A
$I_{cP}$	4 (PW 1ms, $D_u$ 25%)	A
$I_b$	0.5	A
$P_T$	4 ( $T_a = 25$ )	W
	20 ( $T_c = 25$ )	
$T_j$	150	
$T_{stg}$	- 40 ~ + 150	

## 電気的特性

( $T_a = 25$ )

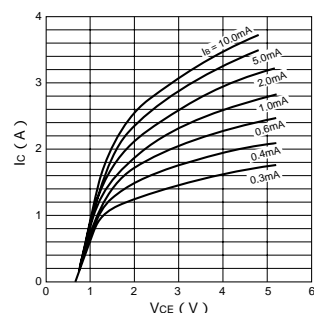
記号	規格値			単位	条件
	min	typ	max		
$I_{CBO}$			10	$\mu A$	$V_{CB} = 50V$
$I_{EBO}$			5	mA	$V_{EB} = 6V$
$V_{CEO}$	50	60	70	V	$I_c = 10mA$
$h_{FE}$	2000	5000	10000		$V_{CE} = 4V, I_c = 1A$
$V_{CE(sat)}$		1.1	1.5	V	$I_c = 1A, I_b = 2mA$
$V_{BE(sat)}$		1.8	2.2	V	
$V_{FEC}$		1.3	1.8	V	$I_{FEC} = 1A$
$t_{on}$		0.5		$\mu s$	$V_{CC} = 30V,$ $I_c = 1A,$
$t_{stg}$		4.0		$\mu s$	
$t_f$		1.0		$\mu s$	$I_{B1} = - I_{B2} = 2mA$
$f_T$		50		MHz	$V_{CE} = 12V, I_E = - 0.1A$
$C_{ob}$		25		pF	$V_{CB} = 10V, f = 1MHz$

## 等価回路図

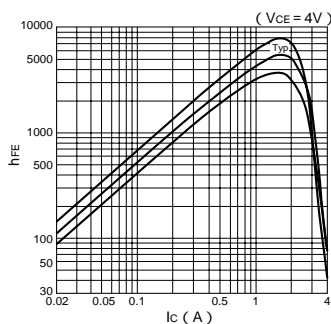


## 特性曲線

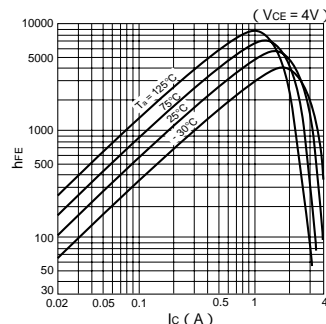
$I_c$ - $V_{CE}$ 特性(代表例)



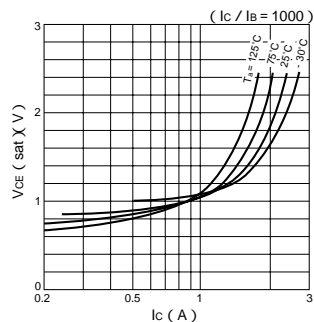
$h_{FE}$ - $I_c$ 特性(代表例)



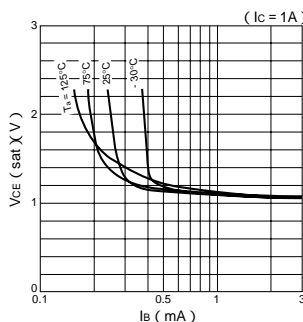
$h_{FE}$ - $I_c$ 温度特性(代表例)



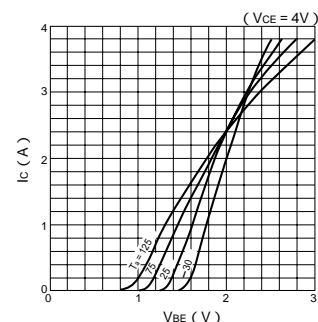
$V_{CE(sat)}$ - $I_c$ 温度特性(代表例)



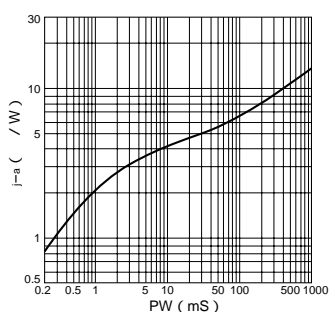
$V_{CE(sat)}$ - $I_b$ 特性(代表例)



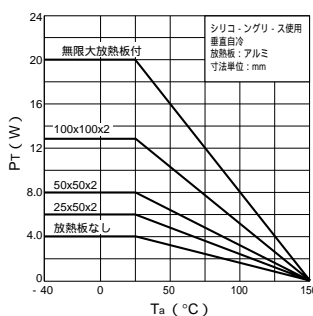
$I_c$ - $V_{BE}$ 温度特性(代表例)



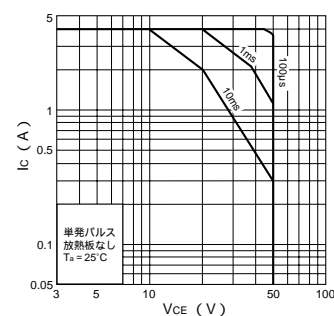
$j$ -a-PW特性



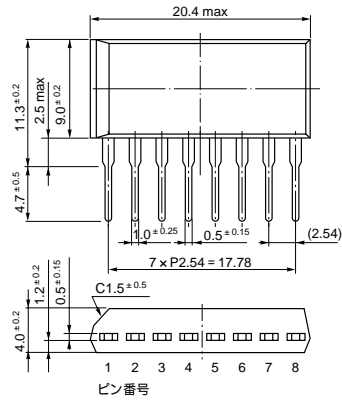
$P_T$ - $T_a$ 特性



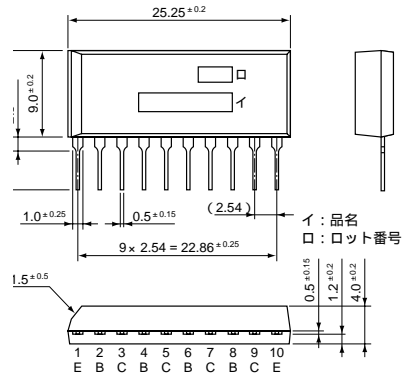
ASO特性



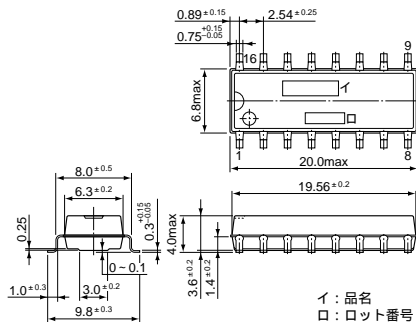
・ STA 8 pin (SIP8Pin)



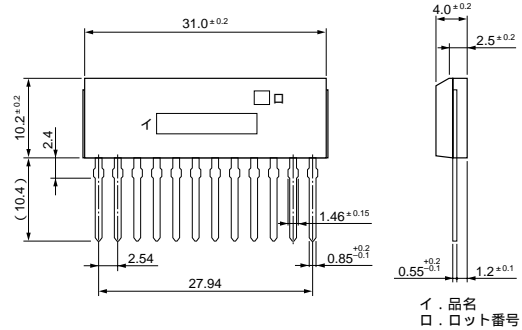
・ STA 10 pin (SIP10Pin)



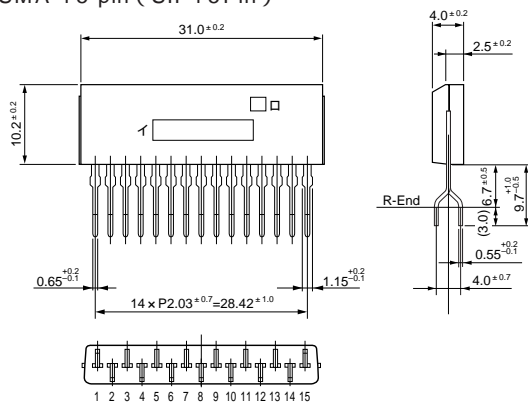
・ SD 16 pin (SMD16Pin)



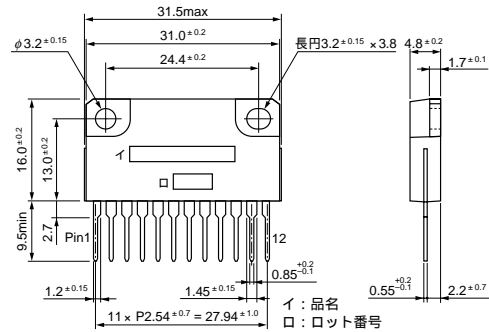
・ SMA 12 pin (SIP12Pin)



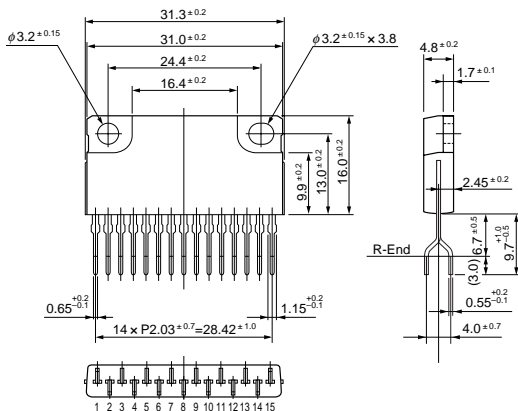
・ SMA 15 pin (SIP15Pin)



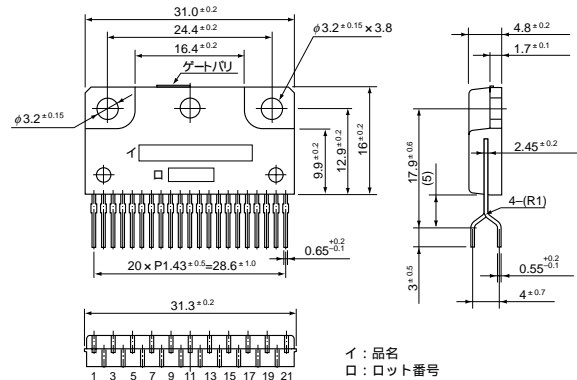
・ SLA 12 pin (SIP12Pin フィン付)



・ SLA 15 pin (SIP15Pin フィン付)



・ SLA 21 pin (SIP21Pin フィン付)



(単位: mm)