

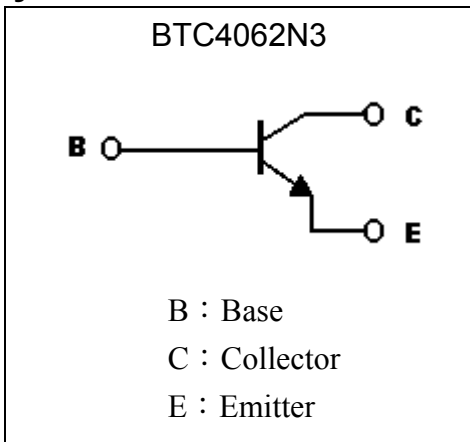
High Voltage NPN Epitaxial Planar Transistor

BTC4062N3

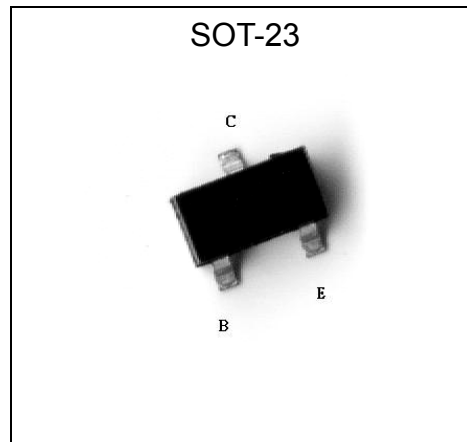
Features

- High Breakdown Voltage: $BV_{CEO} \geq 350V$
- Complementary to BTA1722N3
- Pb-free package

Symbol



Outline



Absolute Maximum Ratings ($T_a=25^\circ C$)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V_{CBO}	350	V
Collector-Emitter Voltage	V_{CEO}	350	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current---continuous	I_C	500	mA
Power Dissipation @ $T_A=25^\circ C$	P_d	225	mW
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{stg}	-55~+150	$^\circ C$

**Characteristics (Ta=25°C)**

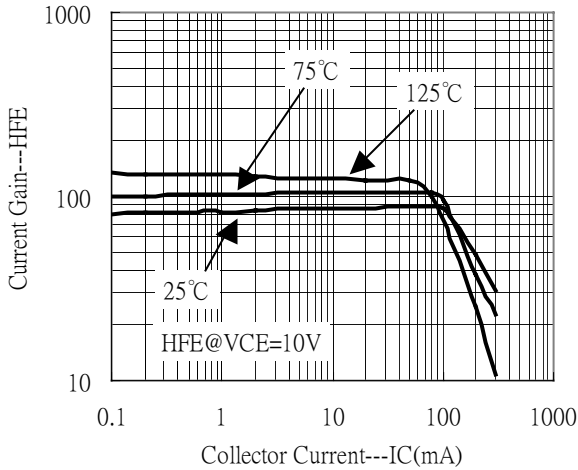
Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV_{CBO}	350	-	-	V	$I_C=100\mu A$
BV_{CEO}	350	-	-	V	$I_C=1mA$
BV_{EBO}	6	-	-	V	$I_E=10\mu A$
I_{CBO}	-	-	50	nA	$V_{CB}=250V$
I_{EBO}	-	-	50	nA	$V_{EB}=5V$
$V_{CE(sat) 1}$	-	-	0.3	V	$I_C=10mA, I_B=1mA$
$V_{CE(sat) 2}$	-	-	0.35	V	$I_C=20mA, I_B=2mA$
$*V_{CE(sat) 3}$	-	-	0.5	V	$I_C=30mA, I_B=3mA$
$*V_{CE(sat) 4}$	-	-	1.0	V	$I_C=50mA, I_B=5mA$
$V_{BE(sat) 1}$	-	-	0.75	V	$I_C=10mA, I_B=1mA$
$V_{BE(sat) 2}$	-	-	0.85	V	$I_C=20mA, I_B=2mA$
$*V_{BE(sat) 3}$	-	-	0.9	V	$I_C=30mA, I_B=3mA$
$V_{BE(on)}$	-	-	2	V	$V_{CE}=10V, I_C=100mA$
$h_{FE 1}$	20	-	-	-	$V_{CE}=10V, I_C=1mA$
$h_{FE 2}$	30	-	-	-	$V_{CE}=10V, I_C=10mA$
$*h_{FE 3}$	30	-	200	-	$V_{CE}=10V, I_C=30mA$
$*h_{FE 4}$	20	-	200	-	$V_{CE}=10V, I_C=50mA$
$*h_{FE 5}$	15	-	-	-	$V_{CE}=10V, I_C=100mA$
f_T	40	-	200	MHz	$V_{CE}=20V, I_C=10mA, f=20MHz$
C_{ob}	-	-	6	pF	$V_{CB}=20V, I_E=0A, f=1MHz$

*Pulse Test: Pulse Width $\leq 380\mu s$, Duty Cycle $\leq 2\%$ **Ordering Information**

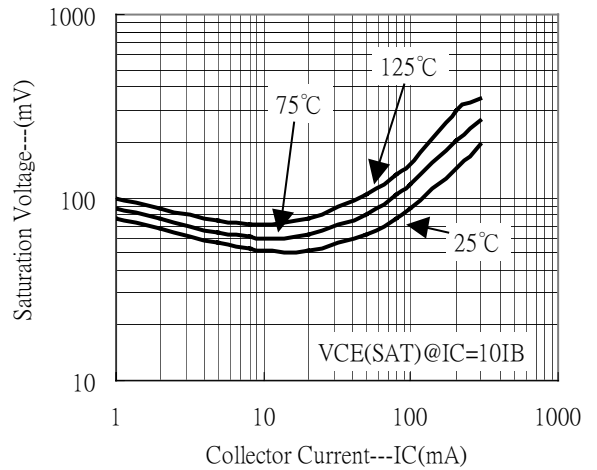
Device	Package	Shipping	Marking
BTC4062N3	SOT-23 (Pb-free)	3000 pcs / Tape & Reel	1Z

Characteristic Curves

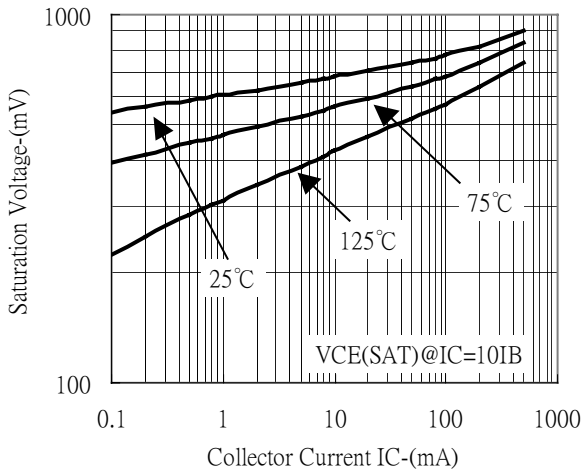
Current Gain vs Collector Current



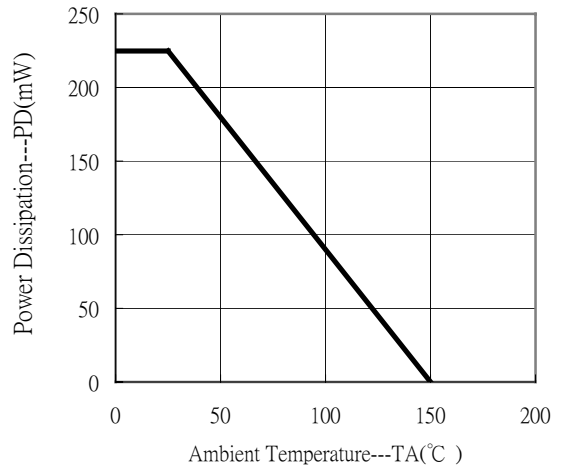
Saturation Voltage vs Collector Current



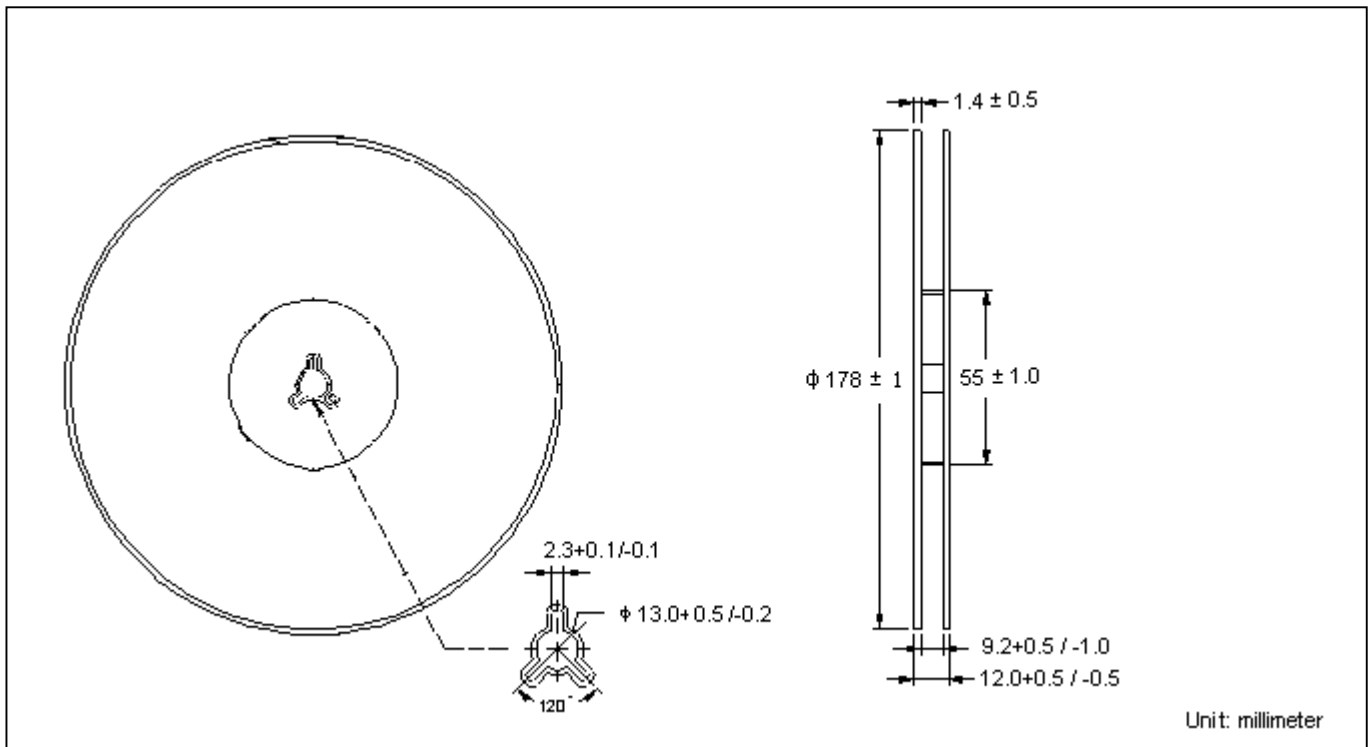
Saturation Voltage vs Collector Current



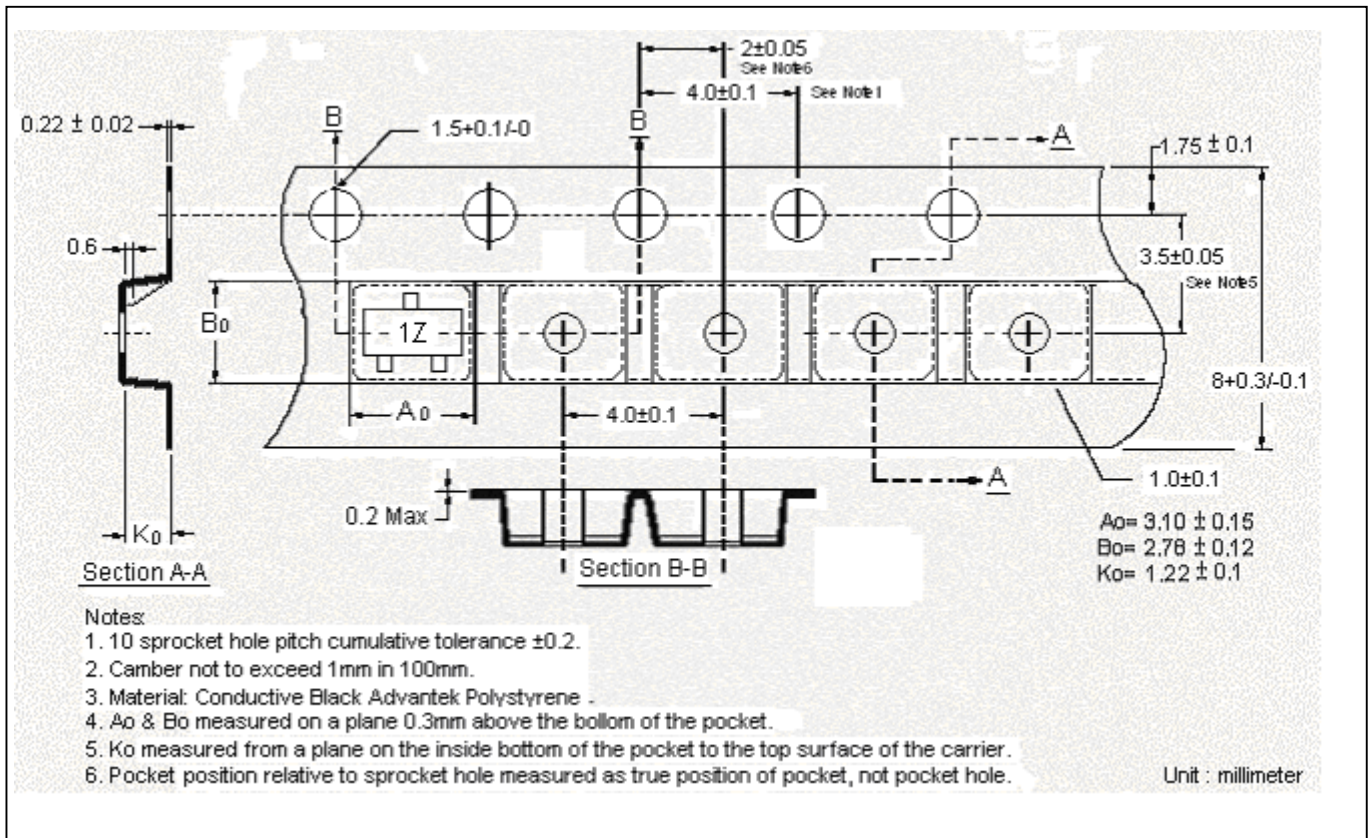
Power Derating Curve



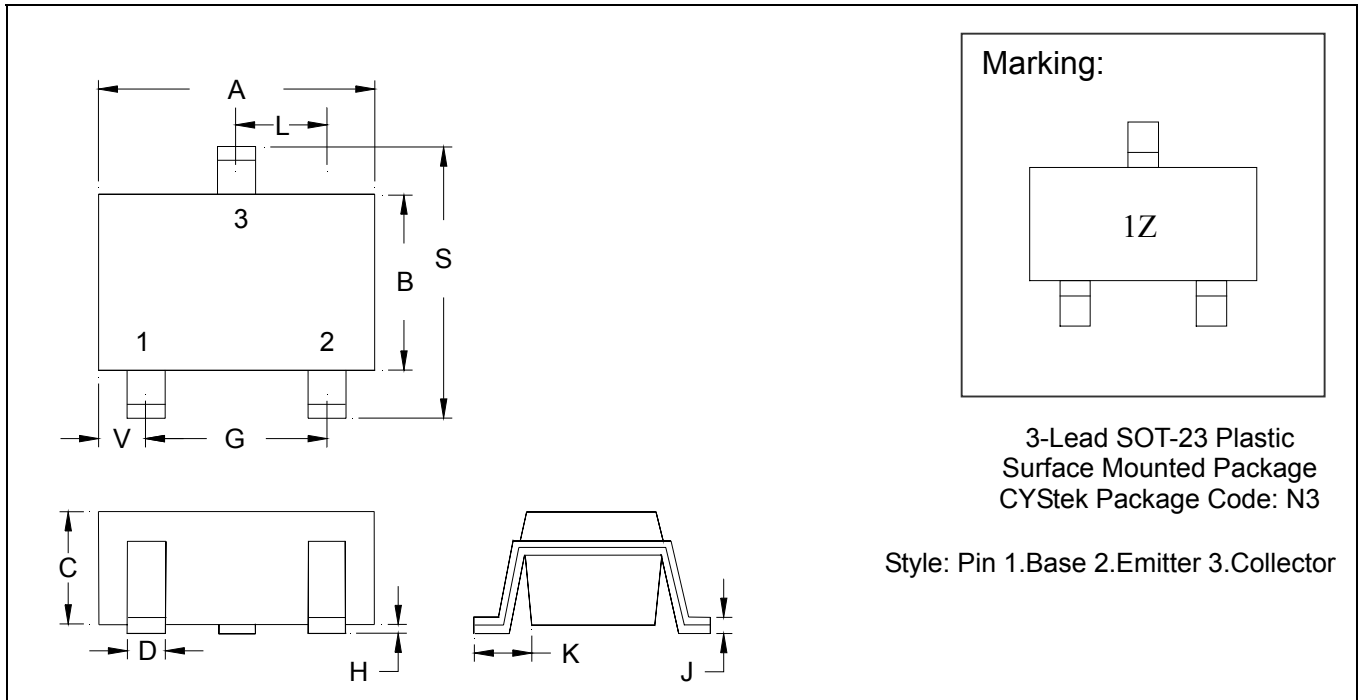
Reel Dimension



Carrier Tape Dimension



SOT-23 Dimension



*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1102	0.1204	2.80	3.04	J	0.0034	0.0070	0.085	0.177
B	0.0472	0.0630	1.20	1.60	K	0.0128	0.0266	0.32	0.67
C	0.0335	0.0512	0.89	1.30	L	0.0335	0.0453	0.85	1.15
D	0.0118	0.0197	0.30	0.50	S	0.0830	0.1083	2.10	2.75
G	0.0669	0.0910	1.70	2.30	V	0.0098	0.0256	0.25	0.65
H	0.0005	0.0040	0.013	0.10					

Notes: 1.Controlling dimension: millimeters.
 2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
 3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.

Material:

- Lead: 42 Alloy ; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

Important Notice:

- All rights are reserved. Reproduction in whole or in part is prohibited without the prior written approval of CYStek.
- CYStek reserves the right to make changes to its products without notice.
- CYStek **semiconductor products are not warranted to be suitable for use in Life-Support Applications, or systems.**
- CYStek assumes no liability for any consequence of customer product design, infringement of patents, or application assistance.