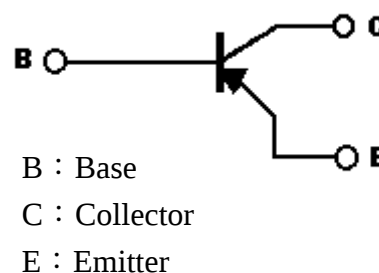
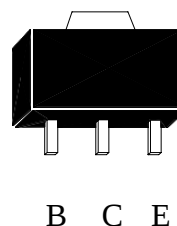


PNP Epitaxial Planar High Current (High Performance) Transistor

Features:

- 3 Amps continuous current, up to 10 Amps peak current
- Very low saturation voltage
- Excellent gain characteristics specified up to 3 Amps
- Extremely low equivalent on resistance, $R_{CE(SAT)}=75m\Omega$ at 3A
- Pb-free lead plating and halogen-free package

SOT-89



Ordering Information

Device	Package	Shipping
KMP955	SOT-89 (Pb-free lead plating and halogen-free package)	1000 pcs / Tape & Reel

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CBO}	-180	V
Collector-Emitter Voltage	V _{CEO}	-140	V
Emitter-Base Voltage	V _{EBO}	-7	V
Continuous Collector Current	I _C	-3	A
Peak Collector Current	I _{CP}	-10	A
Base Current	I _B	-1	A
Power Dissipation	Pd	0.6	W
		1.5 (Note 1)	
		2.1 (Note 2)	
ESD susceptibility		4000 (Note 3)	V
Operating and Storage Temperature Range	T _j ; T _{stg}	-55 ~ +150	°C

Note : 1. When mounted on FR-4 PCB with area measuring 25×25×1.6 mm

2. When mounted on ceramic with area measuring 50×50×1.6 mm

3. Human body model, 1.5kΩ in series with 100pF

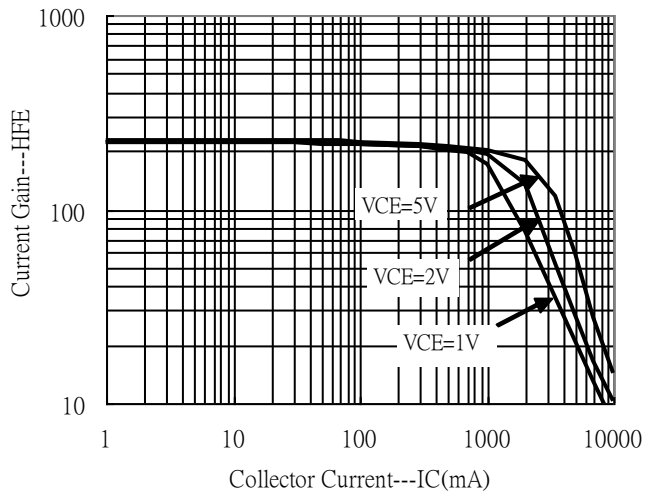
Characteristics (Ta=25°C, unless otherwise specified)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CBO}	-180	-220	-	V	I _C =-100μA
BV _{CER}	-180	-220	-	V	I _C =-1μA, R _{BE} ≤1kΩ
*BV _{CEO}	-140	-170	-	V	I _C =-10mA
BV _{EBO}	-7	-8.3	-	V	I _E =-100μA
I _{CBO}	-	-	-50	nA	V _{CB} =-150V
I _{CER}	-	-	-50	nA	V _{CE} =-150V, R _{BE} ≤1kΩ
I _{EBO}	-	-	-10	nA	V _{EB} =-6V
*V _{CE(sat)} 1	-	-30	-60	mV	I _C =-100mA, I _B =-5mA
*V _{CE(sat)} 2	-	-50	-75	mV	I _C =-500mA, I _B =-50mA
*V _{CE(sat)} 3	-	-110	-165	mV	I _C =-1A, I _B =-100mA
*V _{CE(sat)} 4	-	-220	-330	mV	I _C =-3A, I _B =-300mA
*V _{BE(sat)}	-	-910	-1010	mV	I _C =-3A, I _B =-300mA
*V _{BE(on)}	-	-800	-900	mV	V _{CE} =-5V, I _C =-3A
h _{FE1}	100	-	-	-	V _{CE} =-5V, I _C =-10mA
h _{FE2}	100	-	300	-	V _{CE} =-5V, I _C =-1A
*h _{FE3}	75	-	-	-	V _{CE} =-5V, I _C =-3A
*h _{FE4}	-	10	-	-	V _{CE} =-5V, I _C =-10A
f _T	-	120	-	MHz	V _{CE} =-10V, I _C =-100mA, f=50MHz
Cob	-	35	-	pF	V _{CB} =-10V, f=1MHz
ton		50		ns	I _C =-1A, I _{B1} =-100mA, I _{B2} =100mA, V _{CC} =-50V
toff		700		ns	

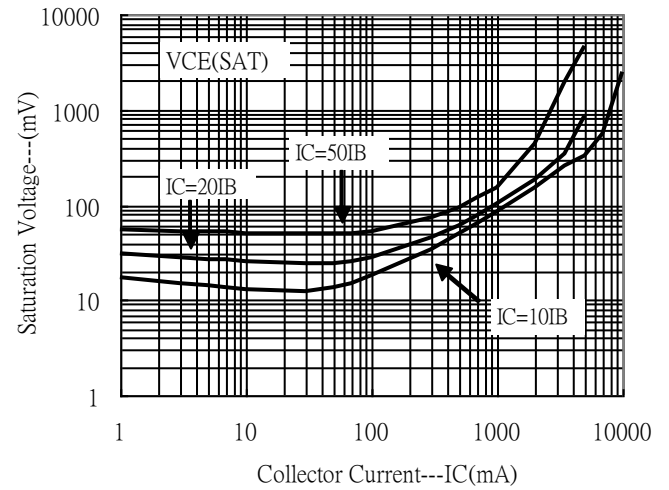
*Pulse Test: Pulse Width ≤300μs, Duty Cycle≤2%

Typical Characteristics

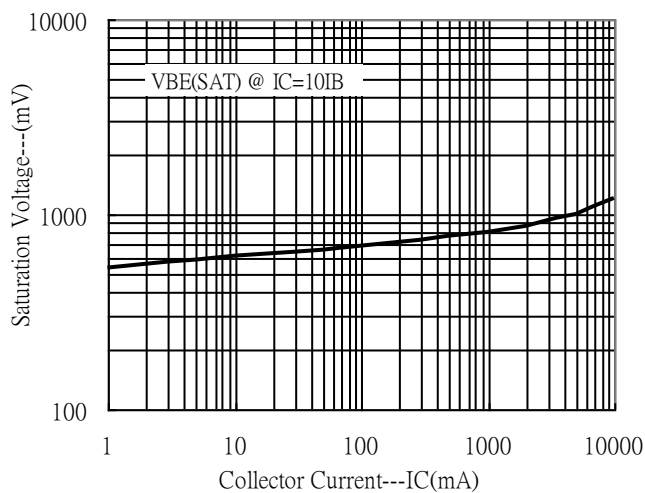
Current Gain vs Collector Current



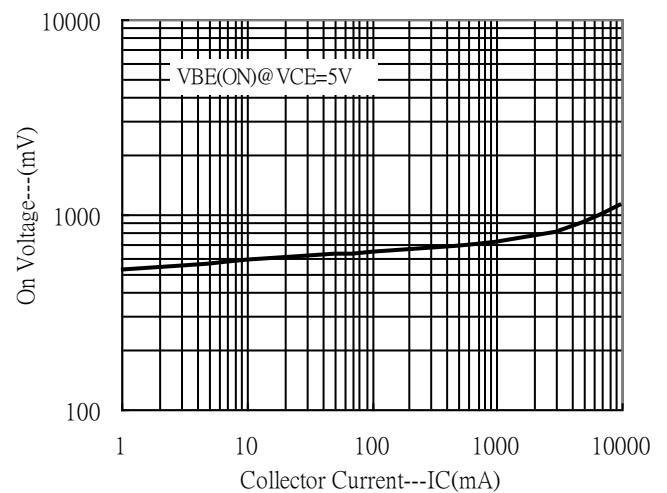
Saturation Voltage vs Collector Current



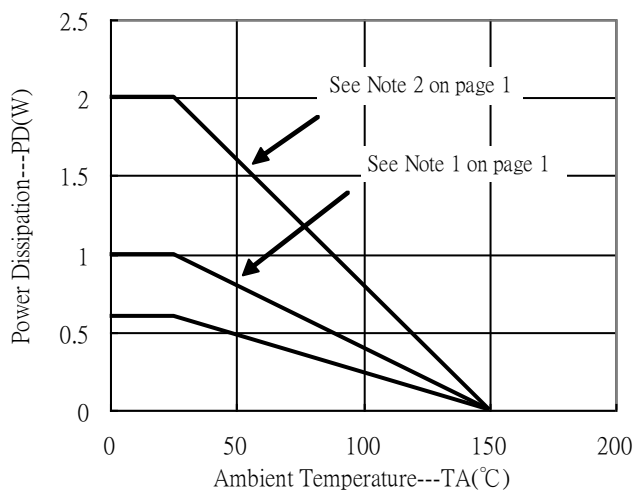
Saturation Voltage vs Collector Current



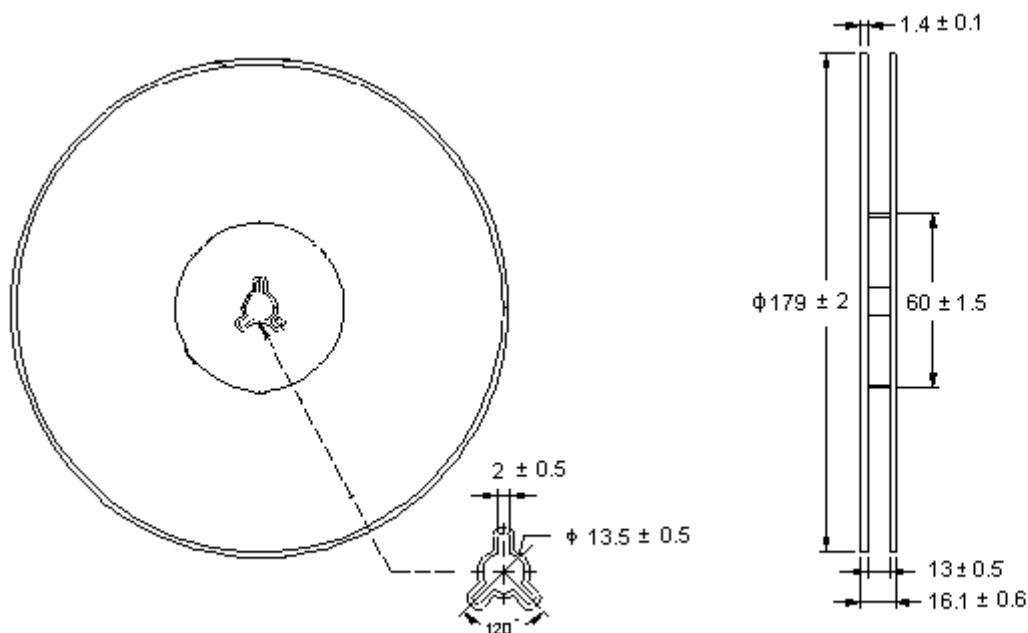
On Voltage vs Collector Current



Power Derating Curve

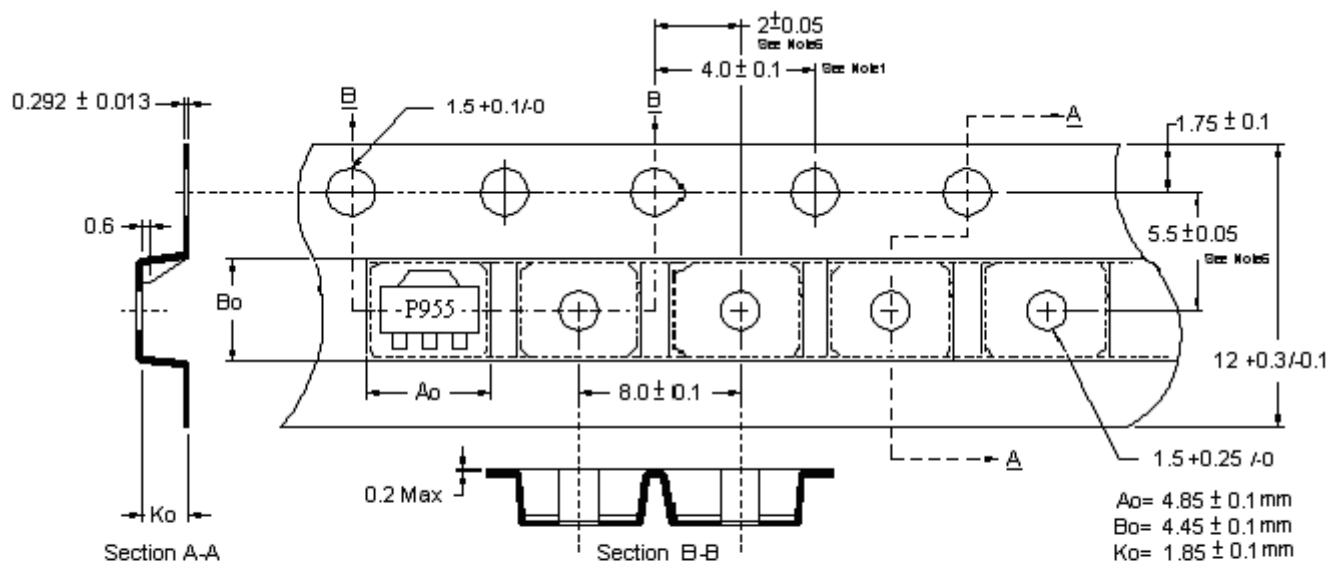


Reel Dimension



Unit: millimeter

Carrier Tape Dimension

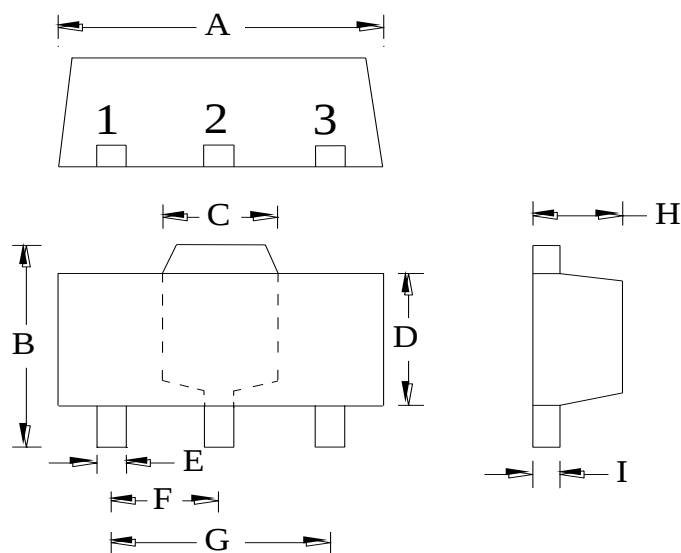


Notes

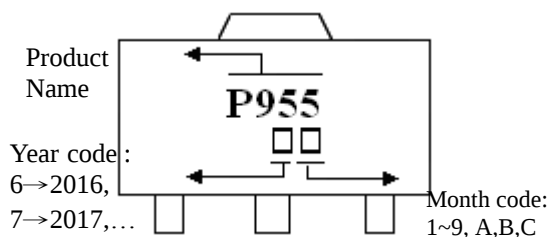
1. 10 sprocket hole pitch cumulative tolerance ± 0.2 .
2. Camber not to exceed 1mm in 100mm.
3. Material: Conductive Black Advantek Polystyrene.
4. A_o & B_o measured on a plane 0.3mm above the bottom of the pocket.
5. K_o measured from a plane on the inside bottom of the pocket to the top surface of the carrier.
6. Pocket position relative to sprocket hole measured as true position of pocket, not pocket hole.

Unit : millimeter

SOT-89 Dimension



Marking:



Style: Pin 1. Base 2. Collector 3. Emitter

3-Lead SOT-89 Plastic
 Surface Mounted Package

*: Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.1732	0.1811	4.40	4.60	F	0.0583	0.0598	1.48	1.527
B	0.1594	0.1673	4.05	4.25	G	0.1165	0.1197	2.96	3.04
C	0.0591	0.0663	1.50	1.70	H	0.0551	0.0630	1.40	1.60
D	0.0945	0.1024	2.40	2.60	I	0.0138	0.0161	0.35	0.41
E	0.01417	0.0201	0.36	0.51					