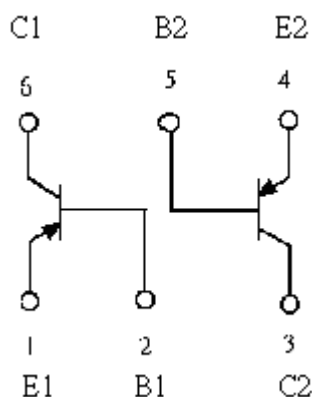
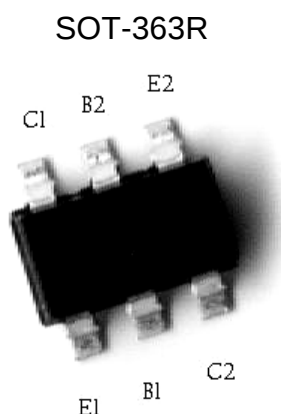


General Purpose PNP Epitaxial Planar Transistors (dual transistors)

Features:

- Mounting possible with SOT-323 automatic mounting machines.
- Transistor elements are independent, eliminating interference.
- Mounting cost and area can be cut in half.
- Pb-free lead plating and halogen-free package.



Ordering Information

Device	Package	Shipping
KWA1514R	SOT-363 (Pb-free lead plating and halogen-free package)	3000 pcs / tape & reel

The following characteristics apply to both Tr1 and Tr2

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Collector-Base Voltage	V _{CB0}	-180	V
Collector-Emitter Voltage	V _{CEO}	-160	V
Emitter-Base Voltage	V _{EBO}	-5	V
Collector Current	I _C	-0.6	A
Total Power Dissipation	P _D	200 (Note)	mW
Thermal Resistance, Junction to Ambient	R _{θJA}	625	°C/W
Operating Junction and Storage Temperature Range	T _j ; T _{stg}	-55~+150	°C

Note : 150mW per element must not be exceeded

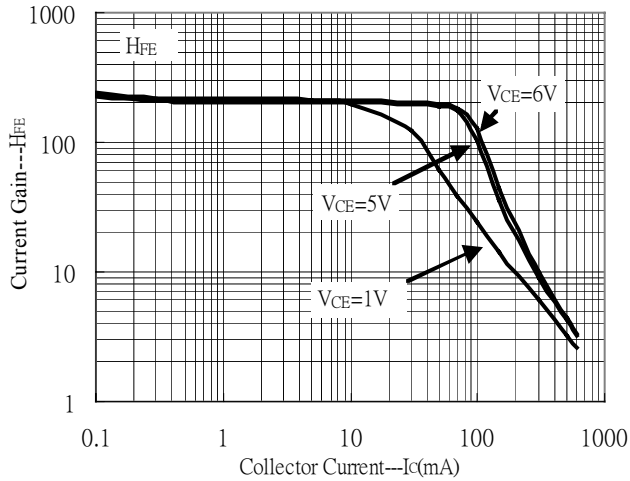
Characteristics (Ta=25°C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BV _{CB0}	-180	-	-	V	I _C =-50μA
BV _{CEO}	-160	-	-	V	I _C =-1mA
BV _{EBO}	-5	-	-	V	I _E =-50μA
I _{CB0}	-	-	-50	nA	V _{CB} =-120V
I _{EBO}	-	-	-50	nA	V _{EB} =-4V
*V _{CE(sat)} 1	-	0.11	-0.16	V	I _C =-10mA, I _B =-1mA
*V _{CE(sat)} 2	-	0.25	-0.3	V	I _C =-50mA, I _B =-5mA
*V _{BE(sat)} 1	-	-	-1	V	I _C =-10mA, I _B =-1mA
*V _{BE(sat)} 2	-	-	-1	V	I _C =-50mA, I _B =-5mA
h _{FE} 1	100	-	-	-	V _{CE} =-5V, I _C =-1mA
h _{FE} 2	100	-	-	-	V _{CE} =-5V, I _C =-10mA
h _{FE} 3	50	-	-	-	V _{CE} =-5V, I _C =-50mA
h _{FE} 4	120	-	270	-	V _{CE} =-6V, I _C =-2mA
f _T	100	-	-	MHz	V _{CE} =-30V, I _C =-10mA, f=100MHz
C _{ob}	-	-	6	pF	V _{CB} =-10V, f=1MHz

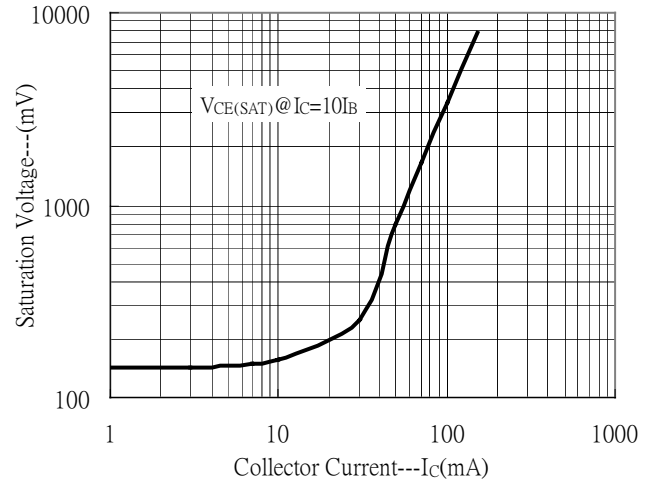
*Pulse Test: Pulse Width ≤380μs, Duty Cycle≤2%

Typical Characteristics

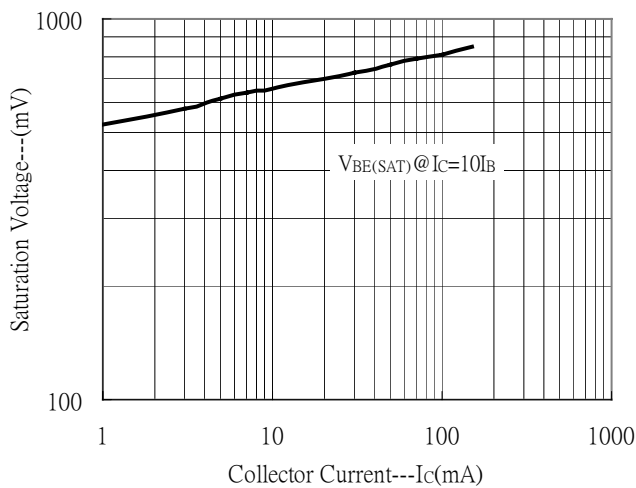
Current Gain vs Collector Current



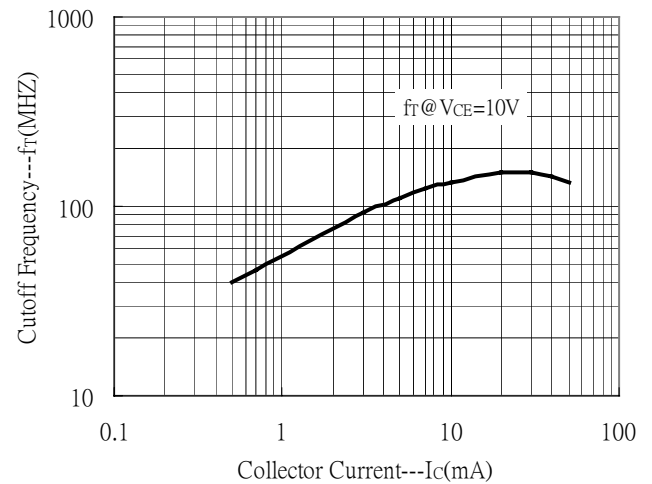
Saturation Voltage vs Collector Current



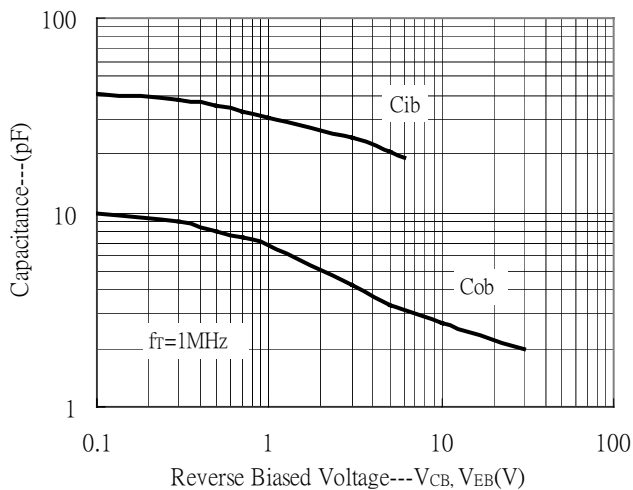
Saturation Voltage vs Collector Current



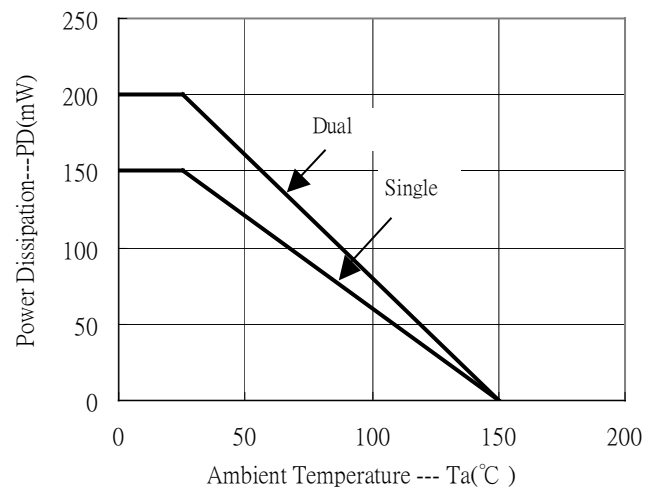
Cutoff Frequency vs Collector Current



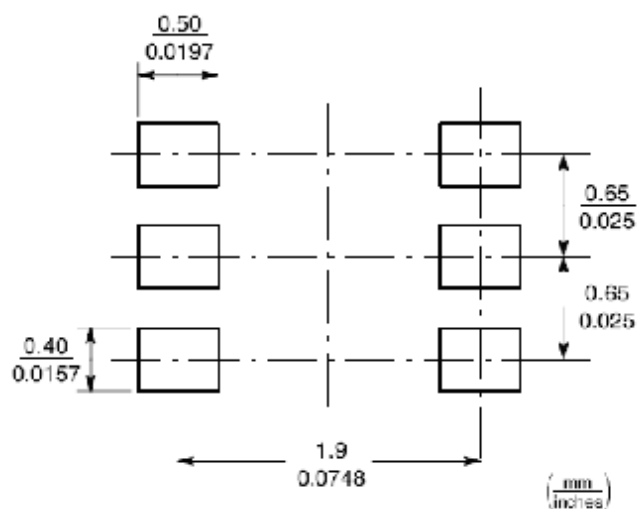
Capacitance Characteristics



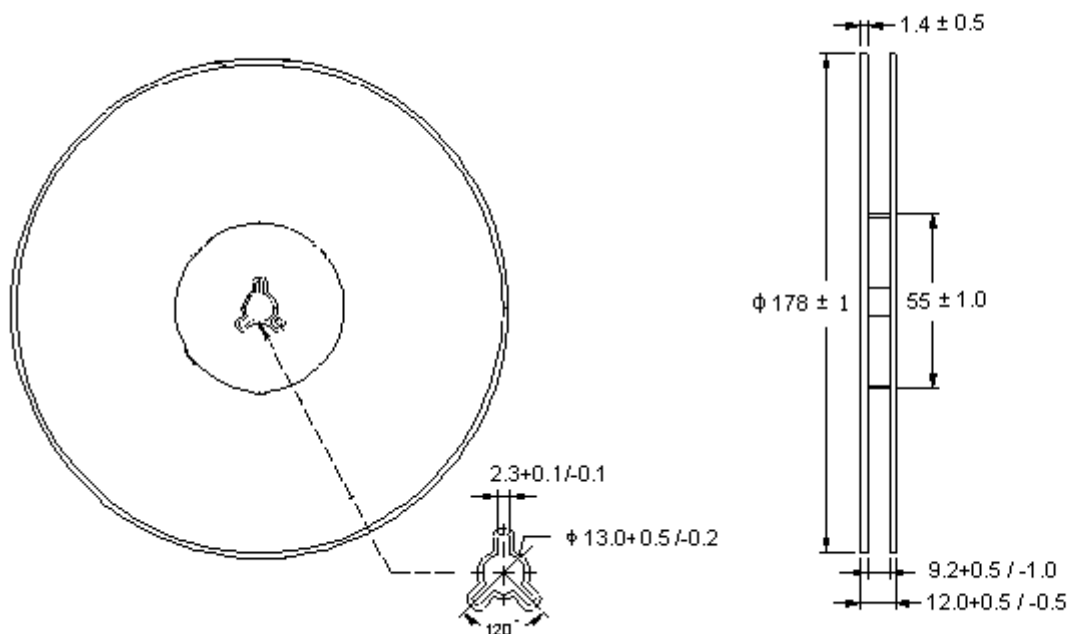
Power Derating Curves



Recommended Soldering Footprint

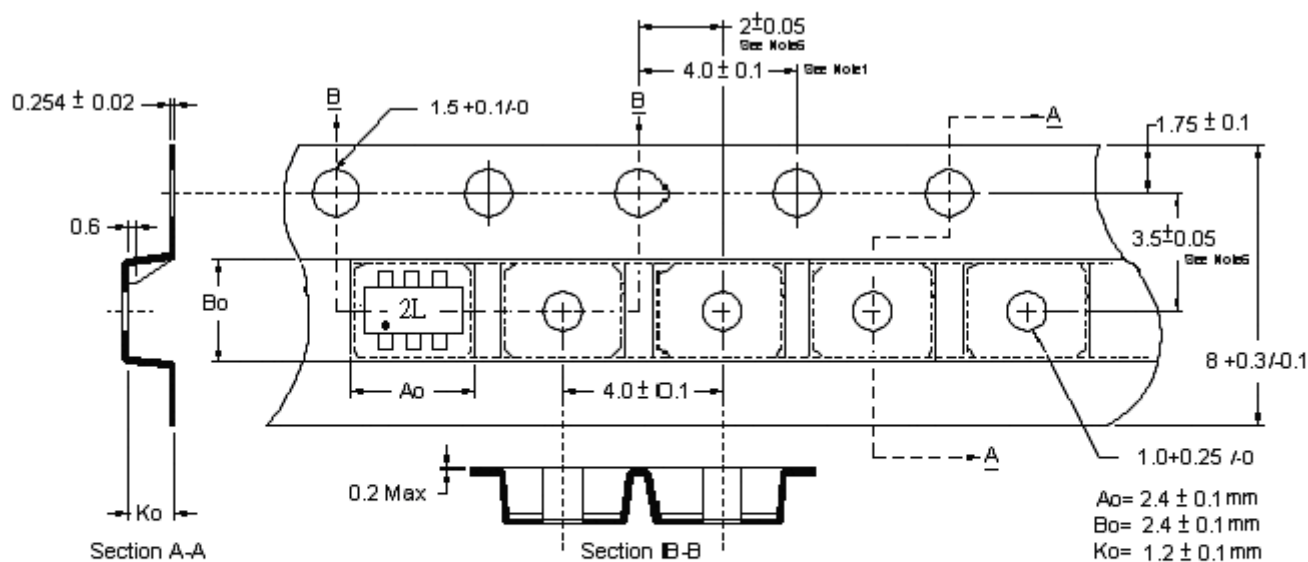


Reel Dimension



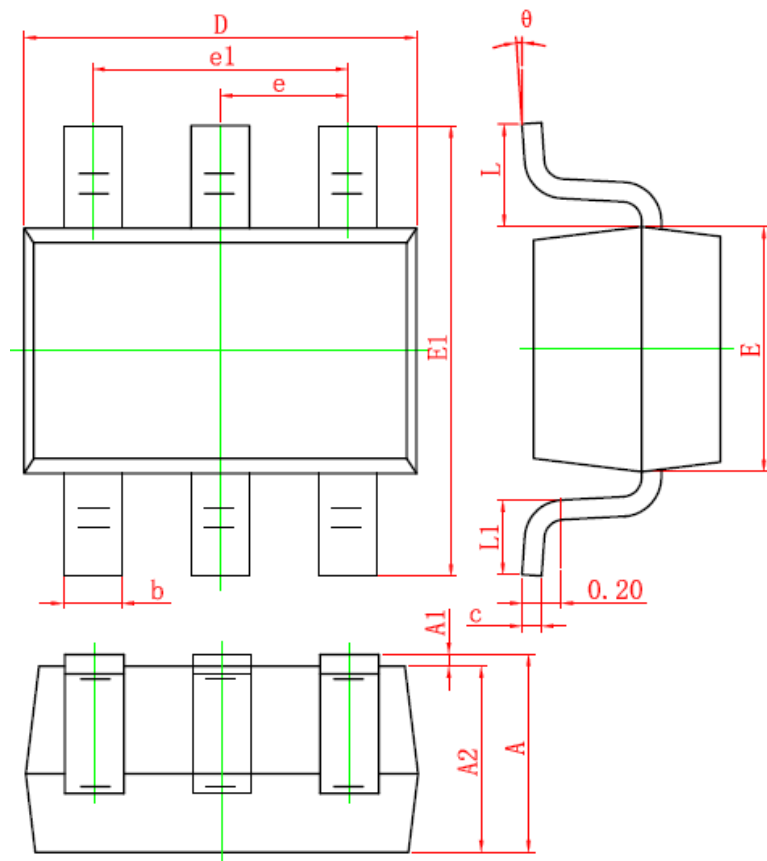
Unit: millimeter

Carrier Tape Dimension

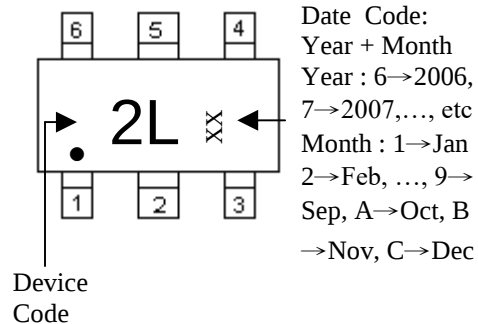


Unit : millimeter

SOT-363 Dimension



Marking:



6-Lead SOT-363 Plastic
Surface Mounted Package

Style:

- Pin 1. Emitter1 (E1)
- Pin 2. Base1 (B1)
- Pin 3. Collector2 (C2)
- Pin 4. Emitter2 (E2)
- Pin 5. Base2 (B2)
- Pin 6. Collector1 (C1)

DIM	Millimeters		Inches		DIM	Millimeters		Inches	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.900	1.100	0.035	0.043	E1	2.150	2.450	0.085	0.096
A1	0.000	0.100	0.000	0.004	e	0.650	TYP	0.026	TYP
A2	0.900	1.000	0.035	0.039	e1	1.200	1.400	0.047	0.055
b	0.150	0.350	0.006	0.014	L	0.525	REF	0.021	REF
c	0.080	0.150	0.003	0.006	L1	0.260	0.460	0.010	0.018
D	2.000	2.200	0.079	0.087	θ	0°	8°	0°	8°
E	1.150	1.350	0.045	0.053					