

Descriptions

This is Silicon NPN+ NPN Dual Transistor in a SOT-563 Plastic Package..

Features

- Two 2SC2412K chips in a SOT-563 package
- Mounting possible with SOT-563 automatic mounting machines
- Transistor elements are independent eliminating Interference
- Mounting cost and area can be cut in half
- RoHS Compliant

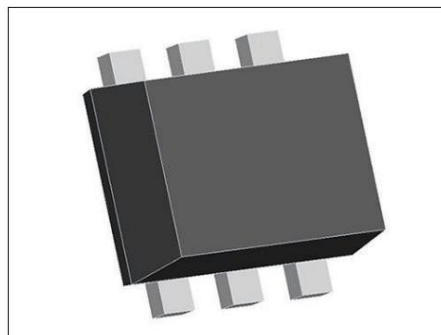
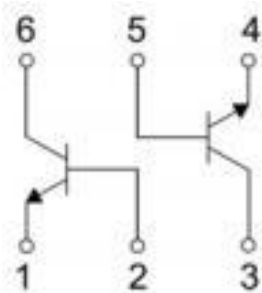
Applications

General purpose small signal amplifier

Mechanical Data

- Lead Finish:Matte Tin
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :3000pcs

Equivalent Circuit & Pinning



2.5: Base 1.4: Emitter 3.6: Collector

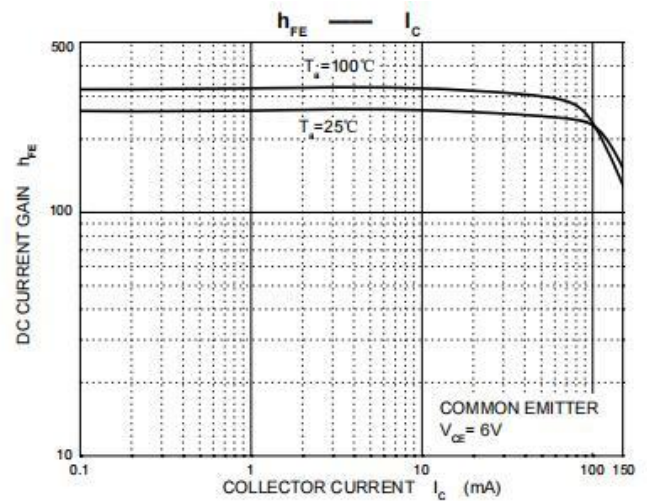
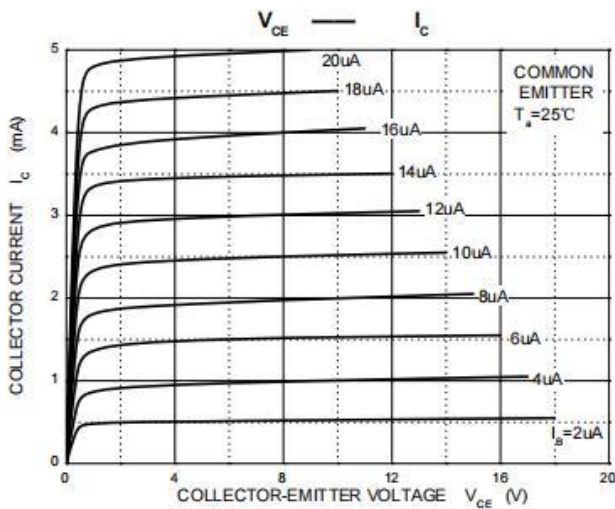
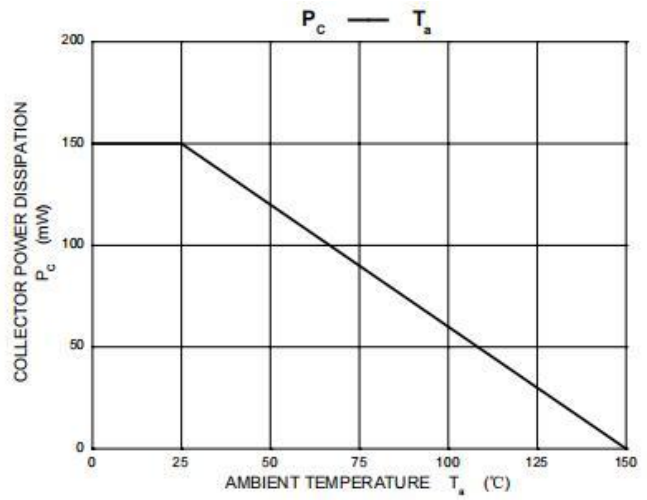
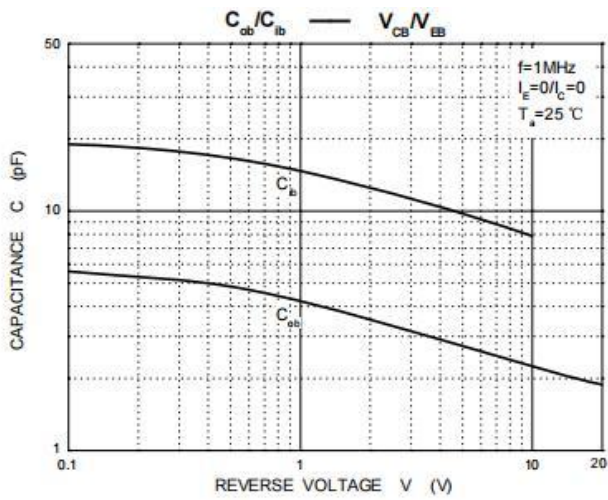
Absolute Maximum Ratings (T=25°C)

Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	7	V
Collector Current Continuous	I_C	150	mA
Collector Power Dissipation	P_D	150	mW
Operating Junction temperature	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

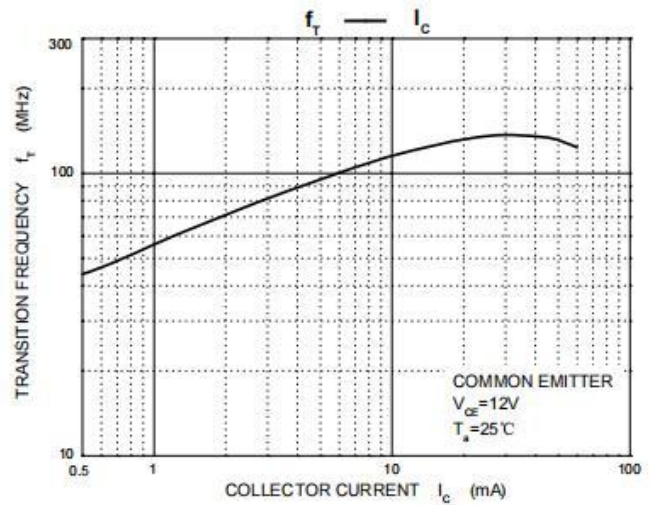
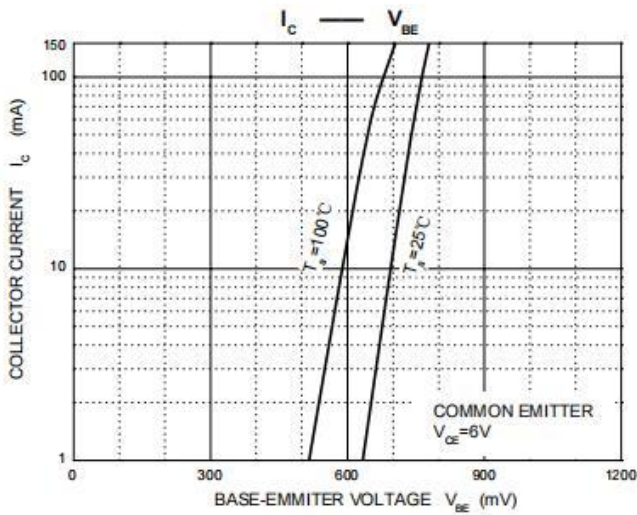
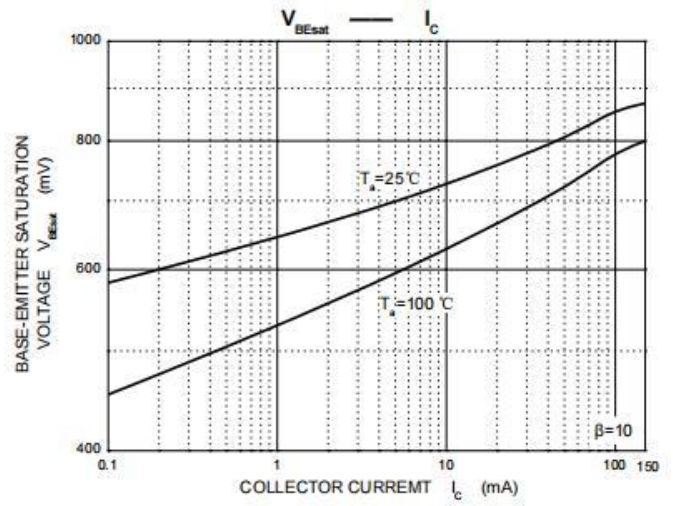
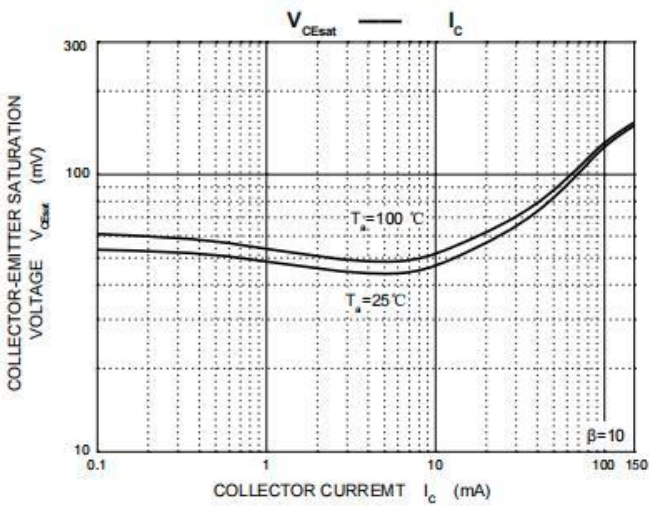
Electrical Characteristics (T=25°C)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=50\mu A, I_E=0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=1mA, I_B=0$	50			V
Collector-emitter breakdown voltage	$V_{(BR)EBO}$	$I_E=50\mu A, I_C=0$	7			V
Collector cut-off current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=7V, I_C=0$			0.1	μA
DC current gain	h_{FE}	$V_{CE}=6V, I_C=1mA$	120		560	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=50mA, I_B=5mA$			0.4	V
Transition frequency	f_T	$V_{CE}=12V,$ $I_C=2mA, f=100MHz$		180		MHz
Collector output capacitance	C_{ob}	$V_{CB}=12V, I_E=0A, f=1MHz$		2.0	3.5	pF

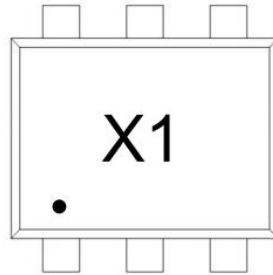
Electrical Characteristic Curve



Electrical Characteristic Curve

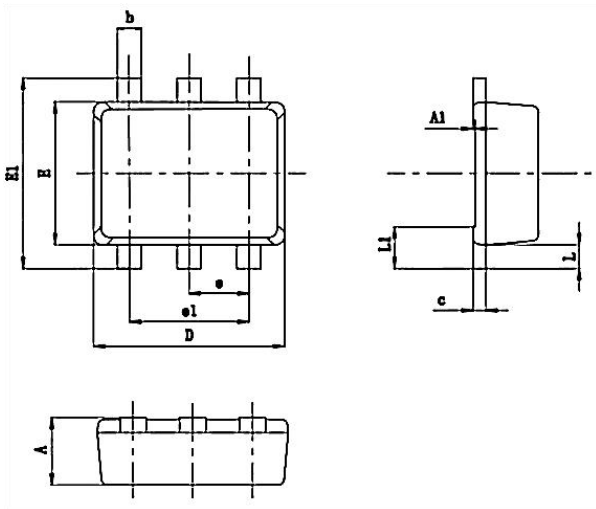


Marking Information



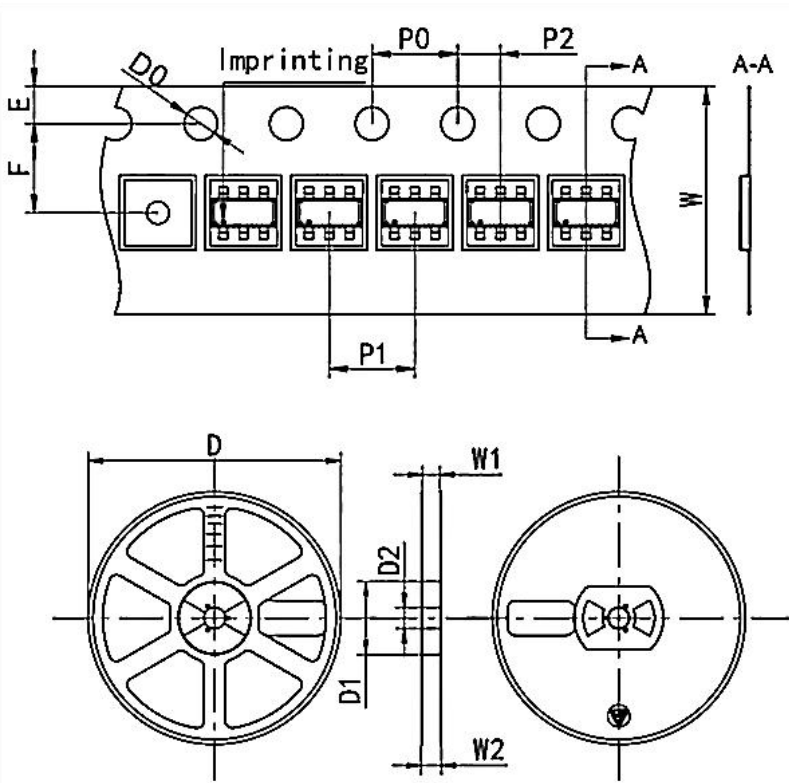
X1= Marking Code

Package mechanical data



Symbol	Millimeters	
	min	max
A	0.50	0.60
A1	0	0.05
D	1.5	1.7
E	1.10	1.30
E1	1.50	1.70
e	(0.5)	
e1	0.9	1.10
b	0.17	0.27
c	0.08	0.15
L	0.12	0.28
L1	(0.3)	

Tape & reel specification - SOT-563



Symbol	Dimension in Millimeters
Typ.	
D0	1.50+0.10/-0.00
E	1.75±0.10
F	3.50±0.10
P0	4.00±0.10
P1	4.00±0.10
P2	2.00±0.10
W	8.00+0.3/-0.1
Reel	
D	178.0±2.00
D1	54.40±1.00
D2	54.40±1.00
W1	9.50±1.00
W2	9.50±1.00

