

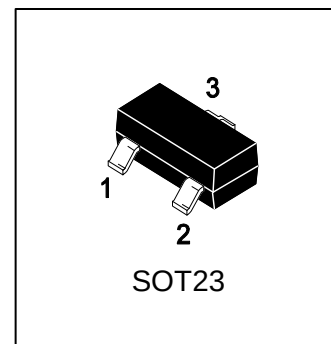
L2SC2412KRLT1G

S-L2SC2412KRLT1G

General Purpose Transistors NPN Silicon

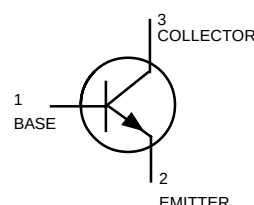
1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L2SC2412KRLT1G	BR	3000/Tape&Reel
L2SC2412KRLT3G	BR	10000/Tape&Reel



3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector-Emitter Voltage	VCEO	50	V
Collector-Base voltage	VCBO	60	V
Emitter-Base Voltage	VEBO	7	V
Collector current —Continuous	IC	150	mA
Collector power dissipation	PC	225	mW
Junction temperature	Tj	150	°C
Storage temperature	Tstg	-55~+150	°C

4. THERMAL CHARACTERISTICS

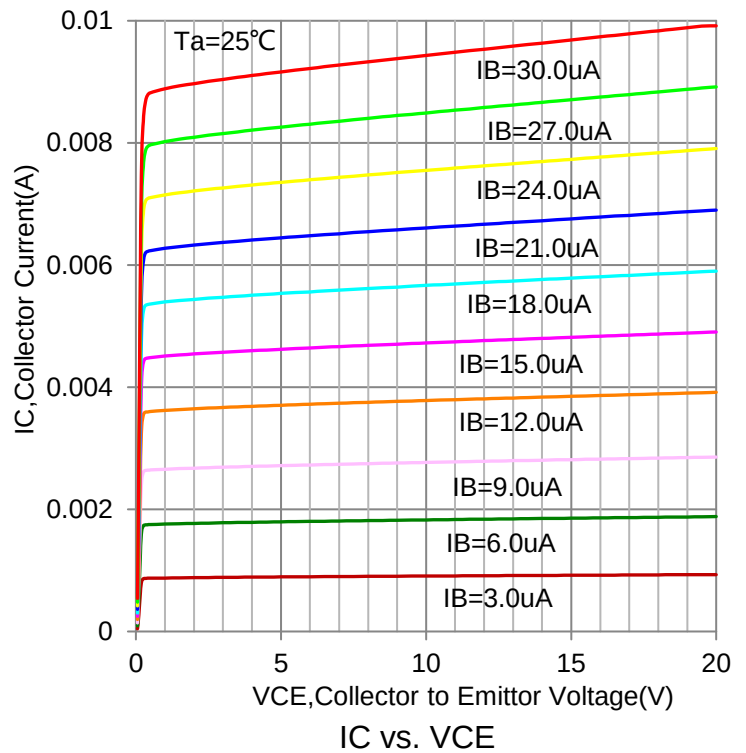
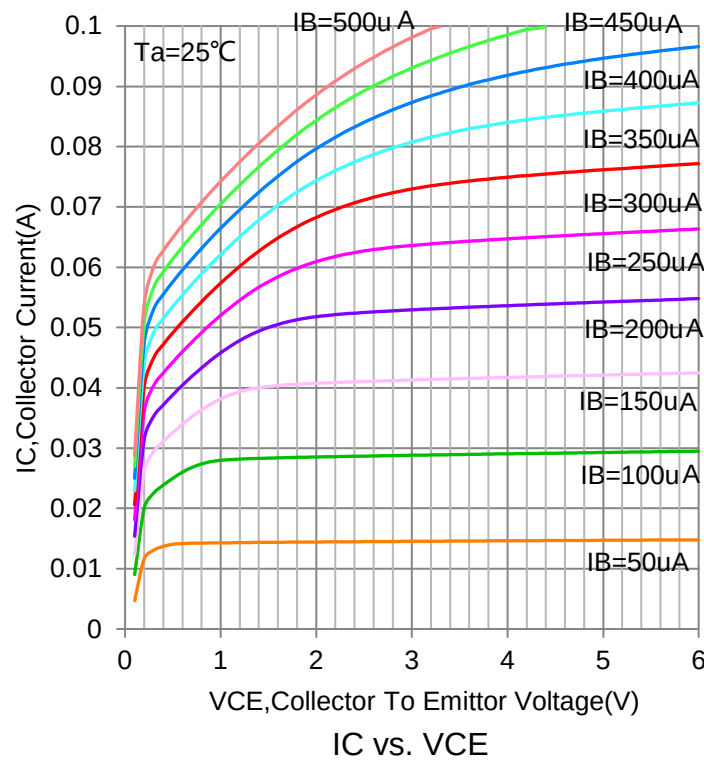
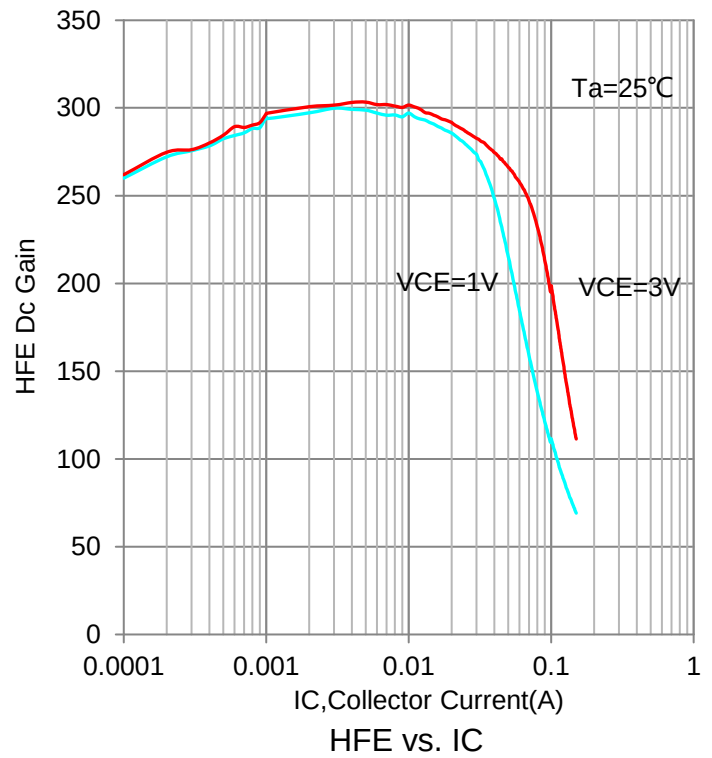
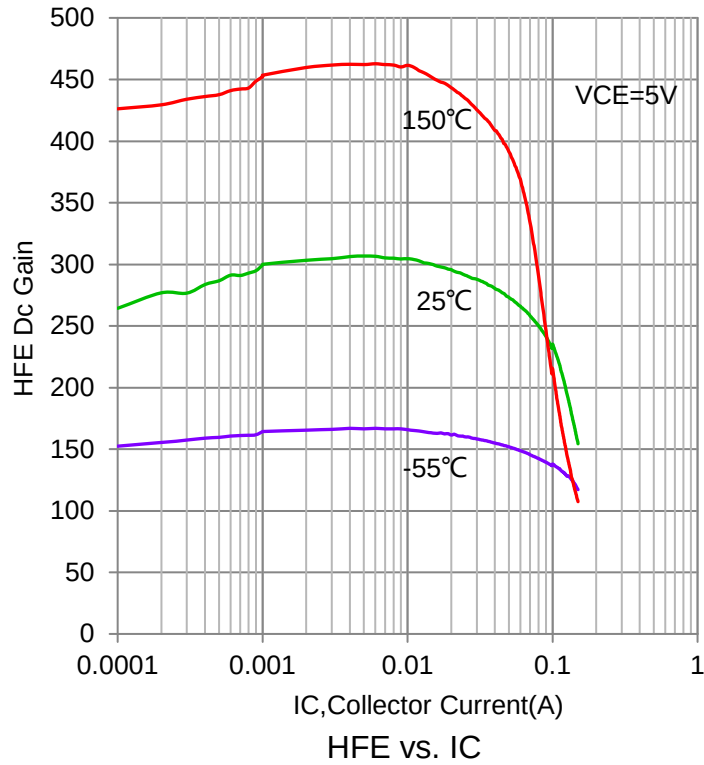
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	RθJA	418	°C/W

1. 30.0mm×25.0mm×1.6mm(FR4), Copper foil thickness 35μm;

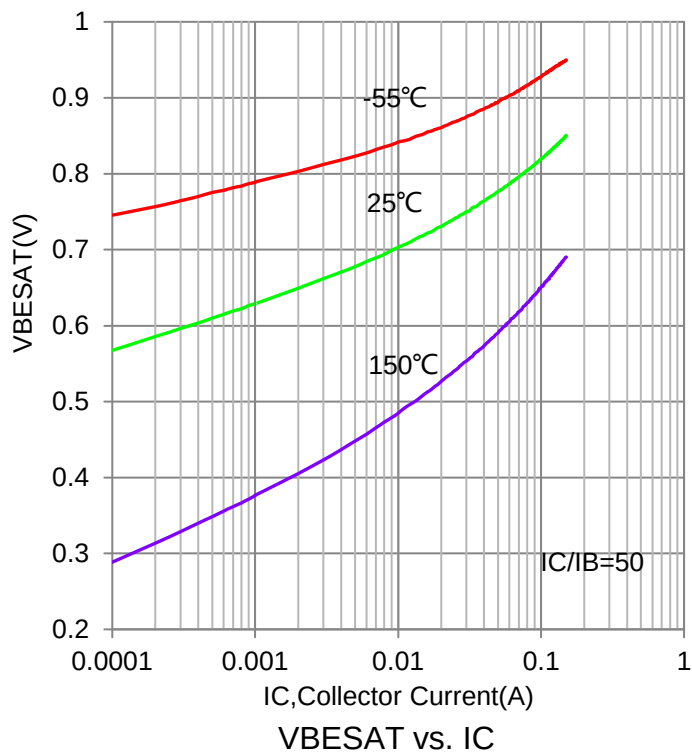
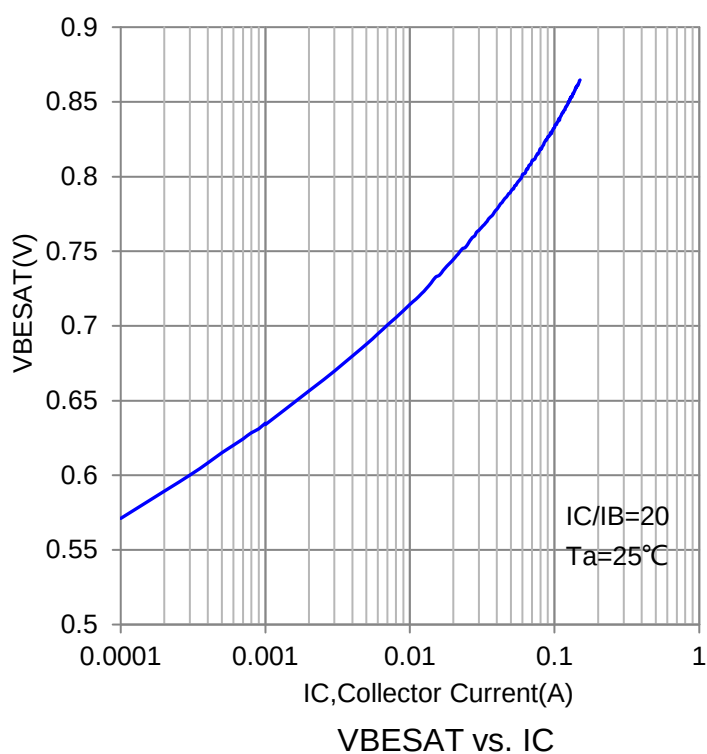
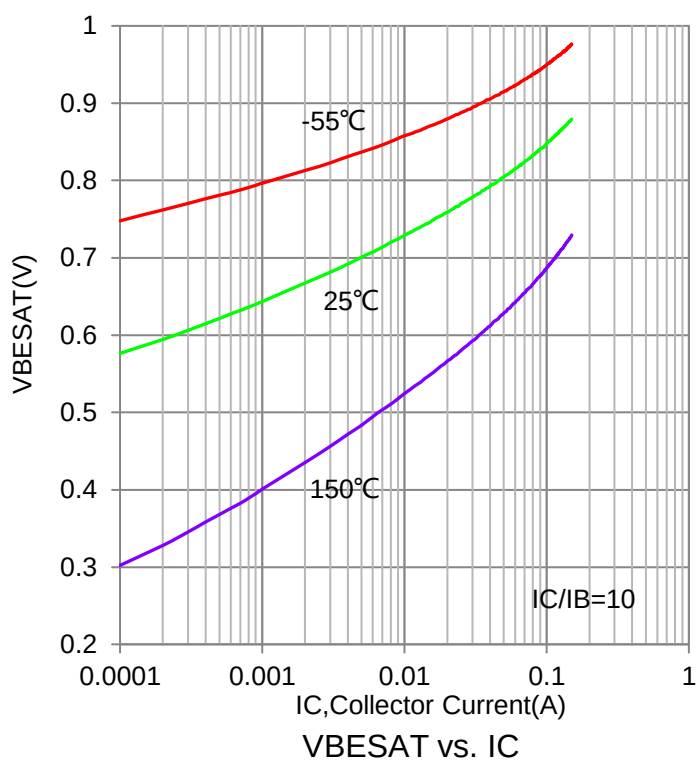
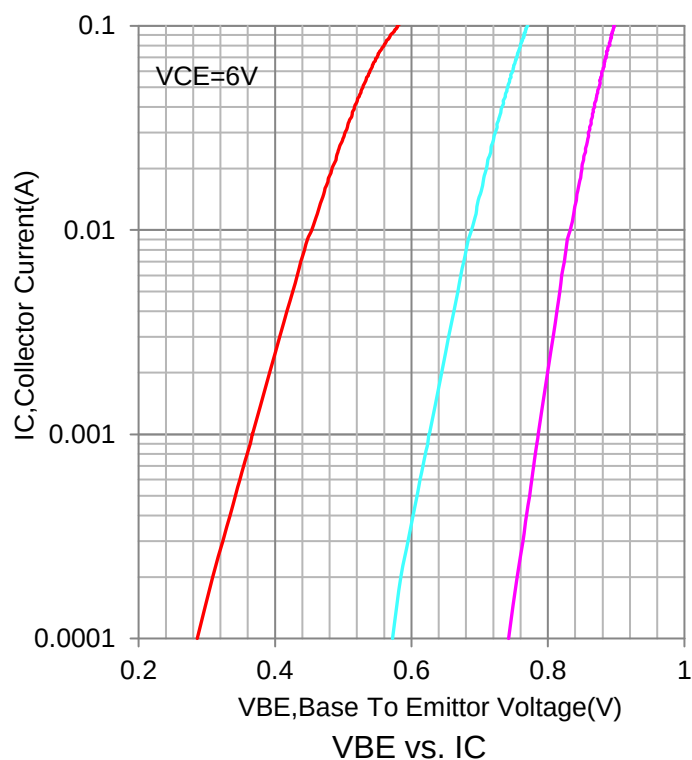
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector-Emitter Breakdown Voltage (IC =1.0mA)	V(BR)CEO	50	-	-	V
Emitter-Base Breakdown Voltage (IE = 50μA)	V(BR)EBO	7	-	-	V
Collector-Base Breakdown voltage (IC = 50μA)	V(BR)CBO	60	-	-	V
Collector Cutoff Current (VCB = 60 V)	ICBO	-	-	0.1	μA
Emitter Cutoff Current (VEB = 7V)	IEBO	-	-	0.1	μA
Collector-Emitter Saturation Voltage (IC / IB = 50 mA / 5m A)	VCE(S)	-	-	0.4	V
Base–Emitter Saturation Voltage (IC = 100mA, IB = 10mA)	VBE(S)	-	-	1.1	V
DC current transfer ratio (VCE = 6 V, IC = 1mA)	hFE	180	-	390	
Transition frequency (VCE = 12 V, IE = 2mA, f =30MHz)	fT	-	180	-	MHz
Output capacitance (VCB = 12 V, IE = 0A, f =1MHz)	Cob	-	2	3.5	pF

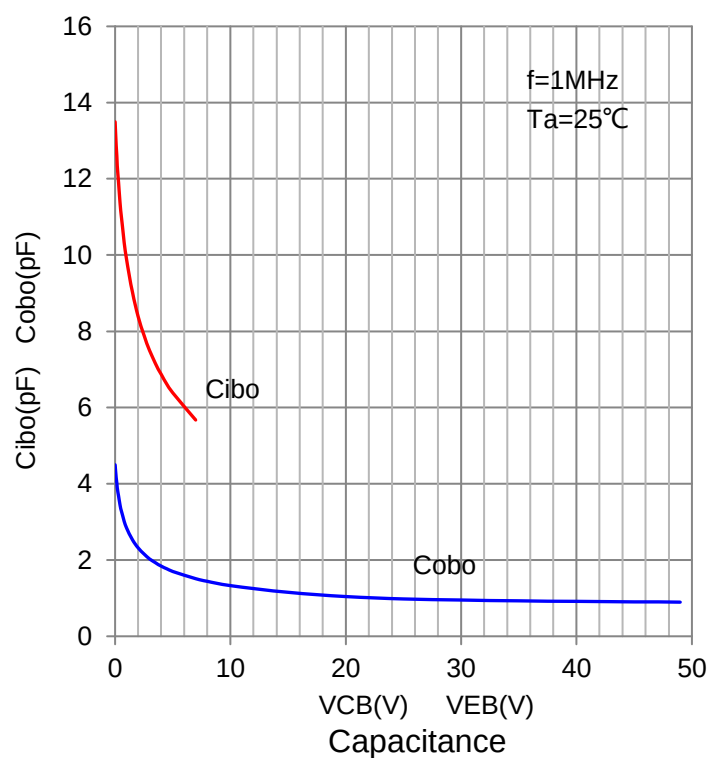
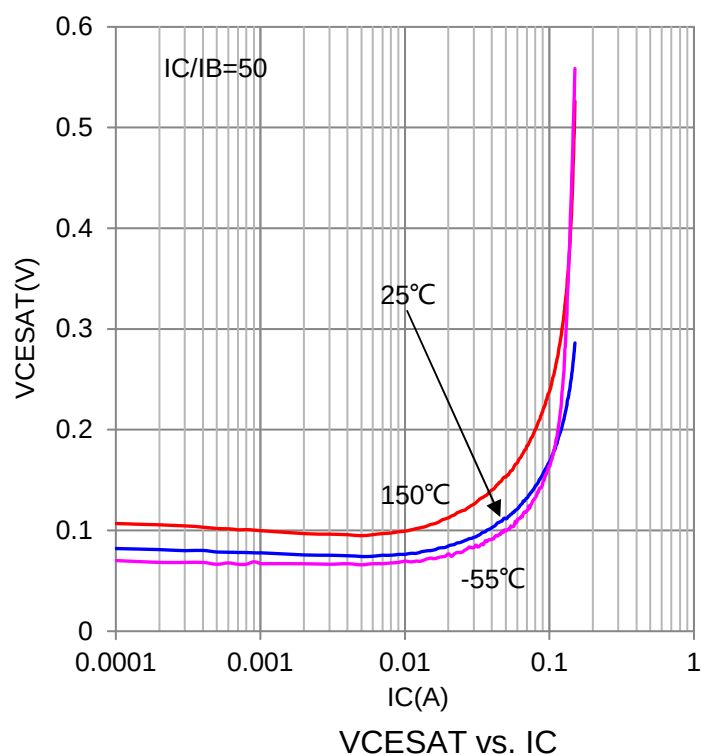
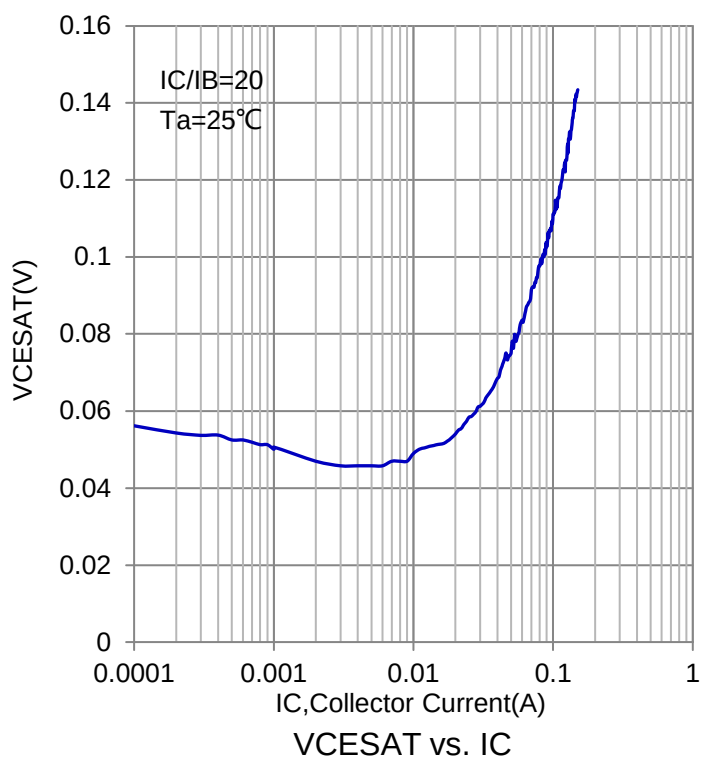
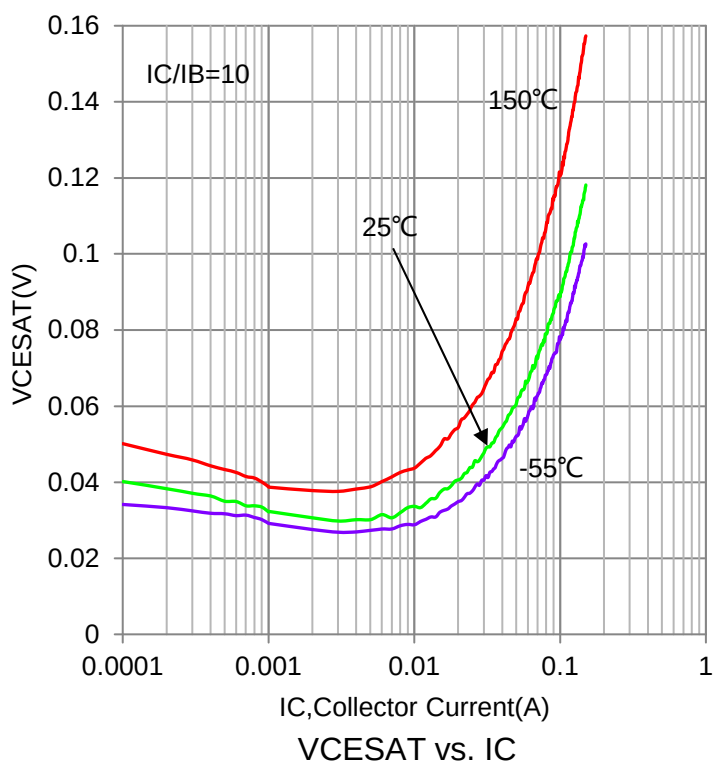
6.ELECTRICAL CHARACTERISTICS CURVES



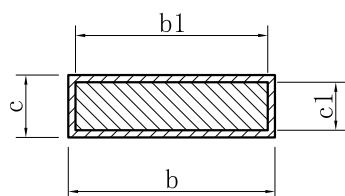
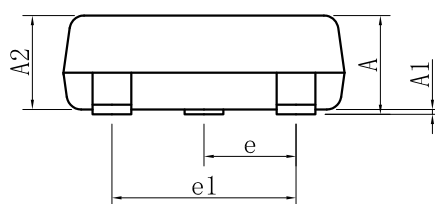
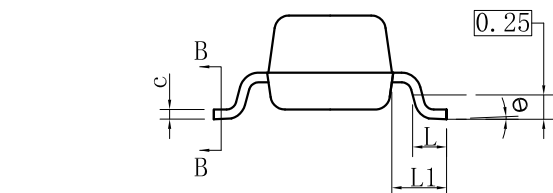
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



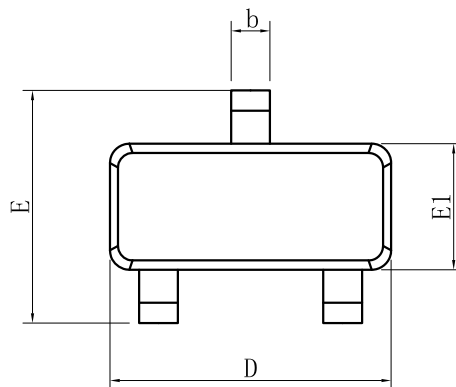
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



7.OUTLINE AND DIMENSIONS



SECTION B-B

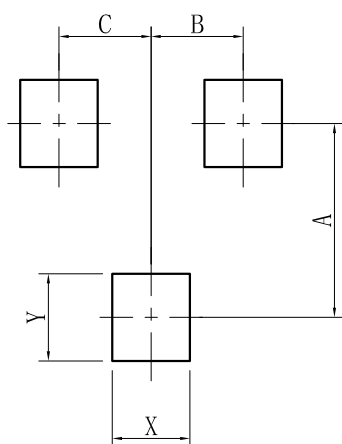


SOT23			
DIM	MIN	NOR	MAX
A	0.89	—	1.12
A1	0.01	—	0.10
A2	0.88	0.95	1.02
b	0.30	—	0.50
b1	0.30	0.40	0.45
c	0.08	—	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	—	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	—	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish Ra0.4±0.2um
- 2.Bottom package surface finish Ra0.7±0.2um
- 3.Side package surface finish Ra0.4±0.2um

8.SOLDERING FOOTPRINT



SOT-23	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.