

EVVOSEMI[®]

THINK CHANGE DO



ESD



TVS



MOS



LDO



Diode



Sensor



DC-DC

Product Specification

▶ Domestic	Part Number	EV2SC1623-S1
▶ Overseas	Part Number	2SC1623
▶ Equivalent	Part Number	2SC1623

"S1" means SOT-23

EV is the abbreviation of name EVVO

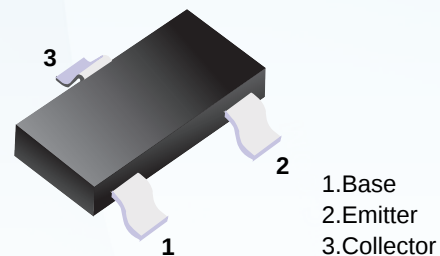
■ NPN Transistors

■ Features

● High DC Current Gain:

 $h_{FE} = 200 \text{ TYP.}$
 $V_{CE} = 6.0 \text{ V, } I_C = 1.0 \text{ mA}$

● High Voltage:

 $V_{CEO} = 50 \text{ V}$


■ Simplified outline(SOT-23)

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Collector to base voltage	V_{CBO}	60	V
Collector to emitter voltage	V_{CEO}	50	V
Emitter to base voltage	V_{EBO}	5	V
Collector current (DC)	I_C	100	mA
Collector power dissipation	P_C	200	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150	$^\circ\text{C}$

■ Electrical Characteristics $T_a = 25^\circ\text{C}$

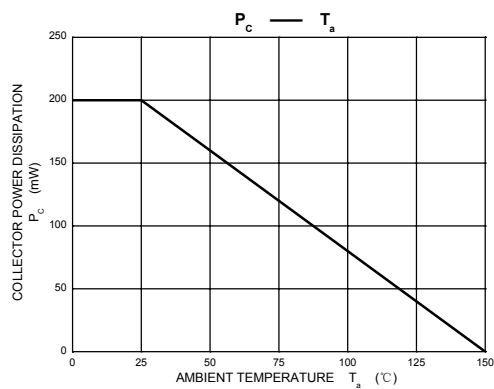
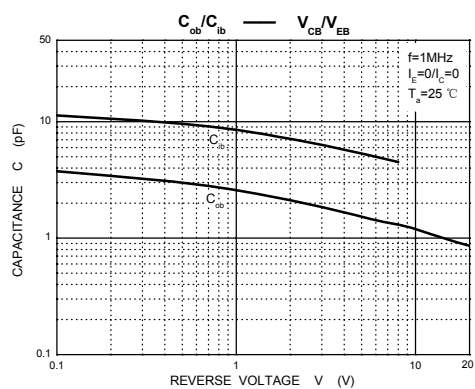
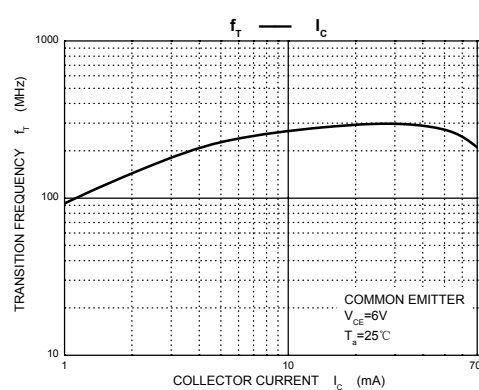
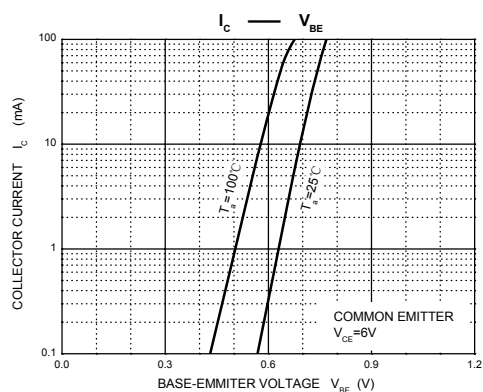
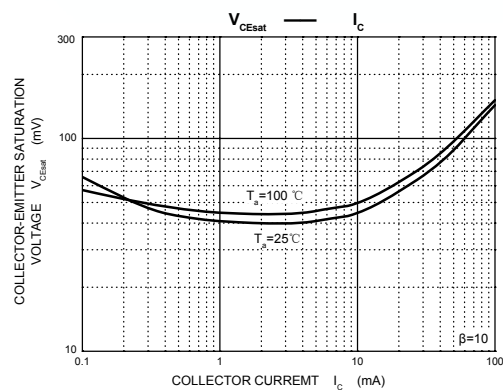
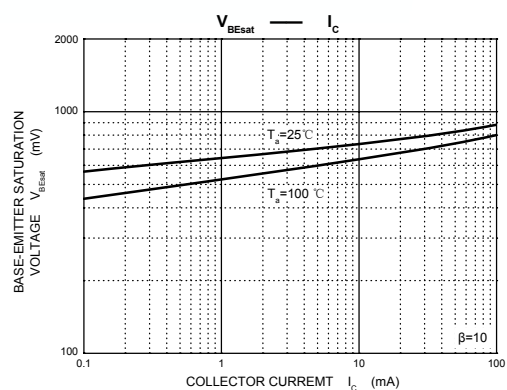
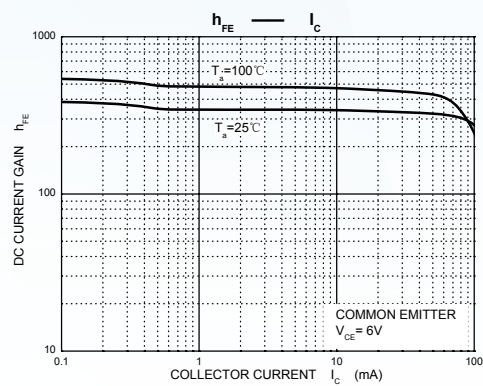
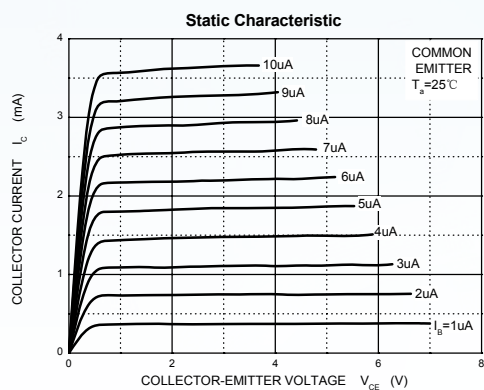
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C = 100 \mu\text{A}, I_E = 0$	60			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 \text{ mA}, I_B = 0$	50			
Emitter - base breakdown voltage	V_{EBO}	$I_E = 100 \mu\text{A}, I_C = 0$	5			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 60 \text{ V}, I_E = 0$			100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5 \text{ V}, I_C = 0$			100	
Collector-emitter saturation voltage *	$V_{CE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$		0.15	0.3	V
Base - emitter saturation voltage *	$V_{BE(sat)}$	$I_C = 100 \text{ mA}, I_B = 10 \text{ mA}$		0.86	1	
Base - emitter voltage *	V_{BE}	$V_{CE} = 6 \text{ V}, I_C = 1 \text{ mA}$	0.55		0.7	
DC current gain *	h_{FE}	$V_{CE} = 6 \text{ V}, I_C = 1 \text{ mA}$	90	200	600	
Collector output capacitance	C_{ob}	$V_{CB} = 6 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		3		pF
Transition frequency	f_T	$V_{CE} = 6 \text{ V}, I_E = -10 \text{ mA}$		250		MHz

*. $PW \leq 350 \mu\text{s}$, duty cycle $\leq 2\%$

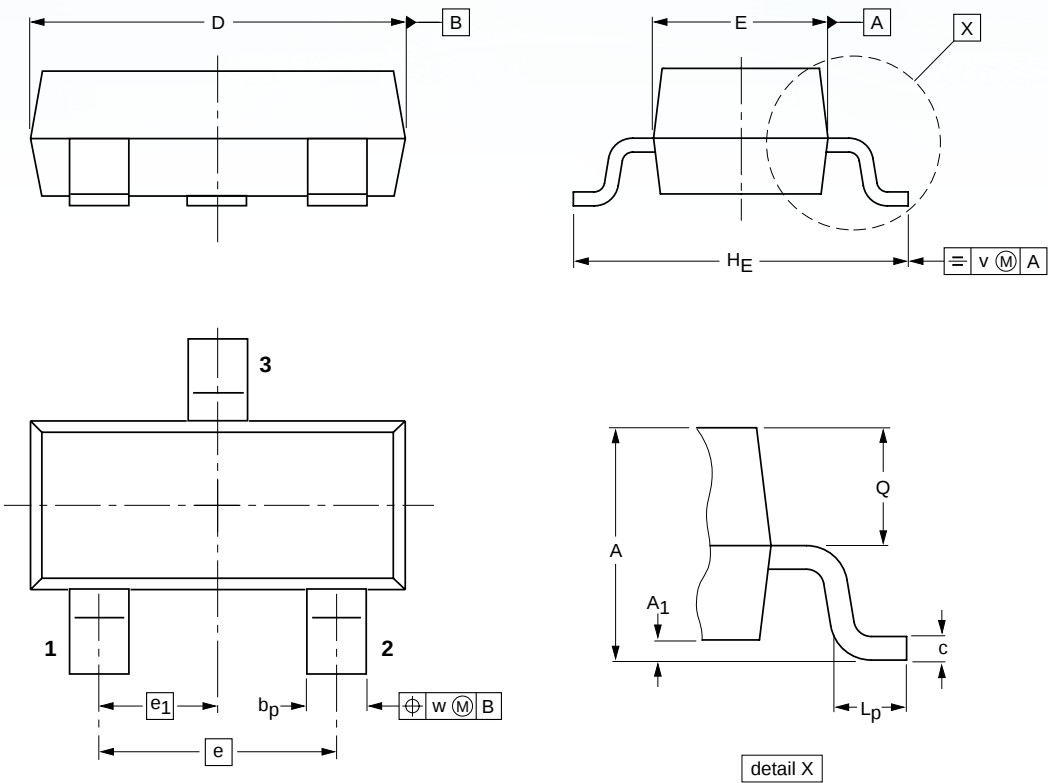
■ h_{FE} Classification

Type	2SC1623-L4	2SC1623-L5	2SC1623-L6	2SC1623-L7
Range	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

■ Typical Characteristics



■ SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Disclaimer

EVVOSEMI ("EVVO") reserves the right to make corrections, enhancements, improvements, and other changes to its products and services at any time, and to discontinue any product or service without notice.

EVVO warrants the performance of its hardware products to the specifications applicable at the time of sale in accordance with its standard warranty. Testing and other quality control techniques are used as deemed necessary by EVVO to support this warranty. Except where mandated by government requirements, testing of all parameters of each product is not necessarily performed.

Customers should obtain and confirm the latest product information and specifications before final design, purchase, or use. EVVO makes no warranty, representation, or guarantee regarding the suitability of its products for any particular purpose, nor does EVVO assume any liability for application assistance or customer product design. EVVO does not warrant or accept any liability for products that are purchased or used for any unintended or unauthorized application.

EVVO products are not authorized for use as critical components in life support devices or systems without the express written approval of EVVOSEMI.

The EVVO logo and EVVOSEMI are trademarks of EVVOSEMI or its subsidiaries in relevant jurisdictions. EVVO reserves the right to make changes without further notice to any products herein.