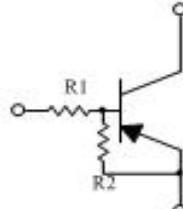
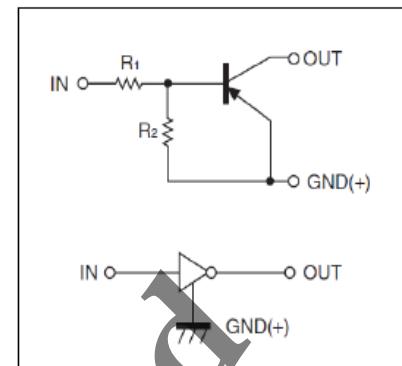


Features

- ◇ Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistor (see equivalent circuit).
- ◇ The bias resistors consist of thin-film resistors with complete isolation to allow negative biasing of the input. They also have the advantage of almost completely eliminating parasitic effects.
- ◇ Only the on/off conditions need to be set for operation, marking device design easy.
- ◇ Green compound (Halogen free) with suffix "G" on packing code and prefix "G" on date code.



Equivalent Circuit



Ordering Information (example)

Part No.	Package	Packing	Packing code	Packing code (Green)	Marking	Manufacture code
DTA123 JM	SOT-723	8K / 7" Reel	RM	RMG	E32	M0

Note : Detail please see "Ordering Information(detail, example)" below.

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value				Unit
		JM	JE	JUA / JCA	JSA	
Power Dissipation	P _D	100	150	200	300	mW
Supply Voltage	V _{CC}			-50		V
Input Voltage	V _{IN}			-12 ~ +5		V
Output Current	I _O			-100		mA
Junction and Storage Temperature Range	T _J , T _{STG}			-55 to + 150		°C

Notes : 1. Valid provided that electrodes are kept at ambient temperature

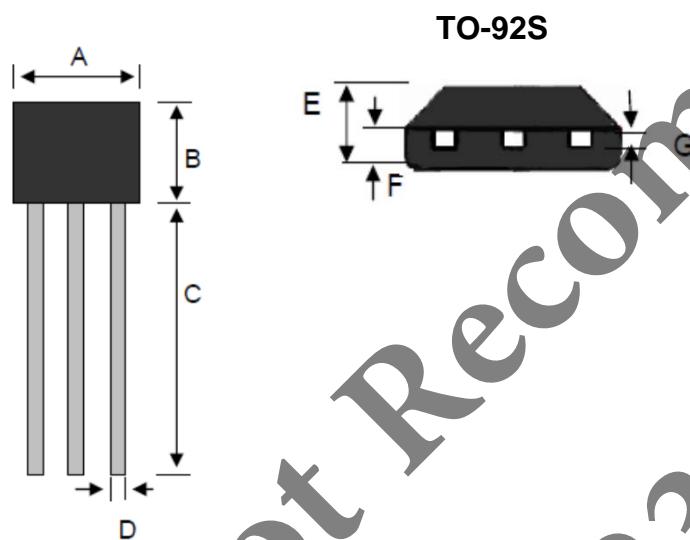
Parameter	Symbol	Min	Typ	Max	Condition	Unit
Input Voltage	V _{I(off)}	-0.5			V _{CC} = -5V , I _O = -100µA	V
	V _{I(on)}			-1.1	V _O = -0.3V , I _O = -5mA	
Output Voltage	V _{O(on)}		-0.1	-0.3	I _O / I _f = -5mA / -0.25mA	V
Input Current	I _I			-3.6	V _f = -5V	mA
Output Current	I _{O(off)}			-0.5	V _{CC} = -50V , V _f = 0	µA
DC Current Gain	G _I	80			V _O = -5V , I _O = -10mA	
Input Resistance	R ₁	1.54	2.2	2.86		KΩ
Resistance Ratio	R ₂ /R ₁	17	21	26		
Transition Frequency	f _T		250		V _O = -10V , I _O = -5mA , f=100MHz	MHz

Ordering information

Part No.	Package	Packing	Packing code	Packing code (Green)	Marking	Manufacture code (Note)
DTA123 JM	SOT-723	8K / 7" Reel	RM	RMG	E32	
DTA123 JE	SOT-523	3K / 7" Reel	RN	RNG	E32	
DTA123 JUA	SOT-323	3K / 7" Reel	RV	RVG	E32	
DTA123 JCA	SOT-23	3K / 7" Reel	RU	RUG	E32	
DTA123 JSA	TO-92S	3K / Box(Ammo)	A3	A3G		
DTA123 JM	SOT-723	8K / 7" Reel	RM	RMG	E32	M0
DTA123 JE	SOT-523	3K / 7" Reel	RN	RNG	E32	M0
DTA123 JUA	SOT-323	3K / 7" Reel	RV	RVG	E32	M0
DTA123 JCA	SOT-23	3K / 7" Reel	RU	RUG	E32	M0
DTA123 JSA	TO-92S	3K / Box(Ammo)	A3	A3G		M0

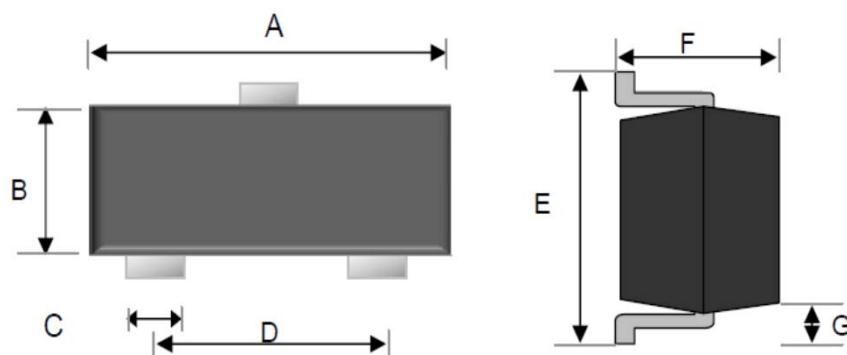
Note : Manufacture special control, if empty means no special control requirement.

Dimensions



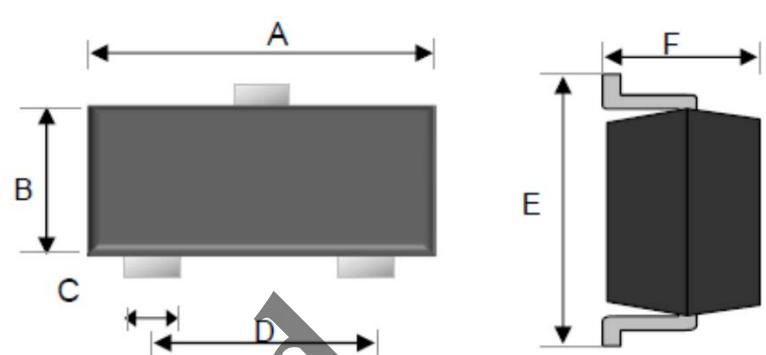
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	3.85	4.15	0.15	0.16
B	3.01	3.31	0.12	0.13
C	15.10	15.50	0.59	0.61
D	0.38	0.55	0.01	0.02
E	1.42	1.62	0.06	0.06
F	0.66	0.86	0.03	0.03
G	0.36	0.51	0.01	0.02

SOT-23



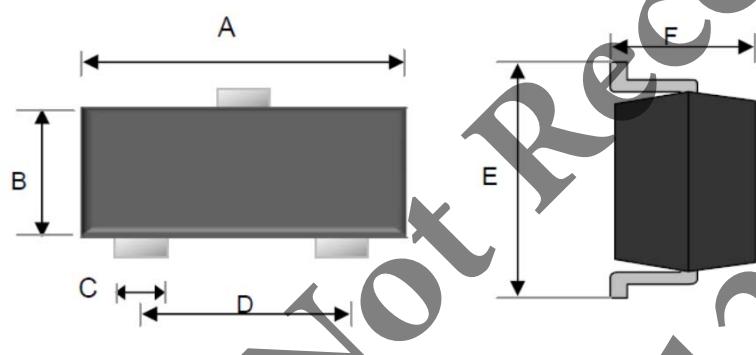
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.80	3.00	0.11	0.12
B	1.20	1.40	0.05	0.06
C	0.30	0.50	0.01	0.02
D	1.80	2.00	0.07	0.08
E	2.25	2.55	0.09	0.10
F	0.90	1.20	0.04	0.04
G	0.550 REF		0.022 REF	

SOT-323



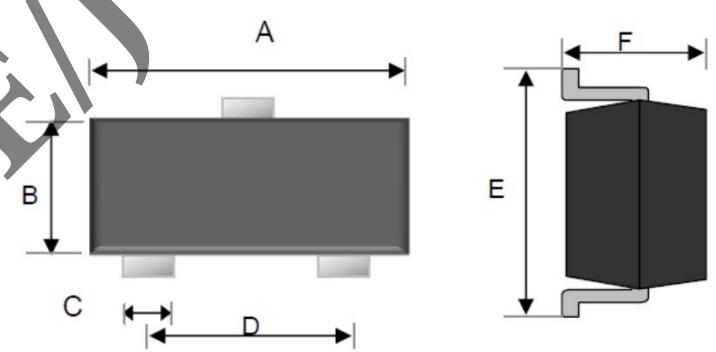
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.90	2.10	0.07	0.08
B	1.15	1.35	0.05	0.05
C	0.25	0.35	0.01	0.01
D	1.20	1.40	0.05	0.06
E	2.00	2.20	0.08	0.09
F	0.80	1.00	0.03	0.04

SOT-523



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.50	1.70	0.06	0.07
B	0.70	0.80	0.03	0.03
C	0.25	0.35	0.01	0.01
D	0.90	1.10	0.04	0.04
E	1.50	1.70	0.06	0.07
F	0.70	0.90	0.03	0.04

SOT-723



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.15	1.25	0.05	0.05
B	0.75	0.85	0.03	0.03
C	0.17	0.27	0.01	0.01
D	0.8 TYP		0.31 TYP	
E	1.15	1.25	0.05	0.05
F				