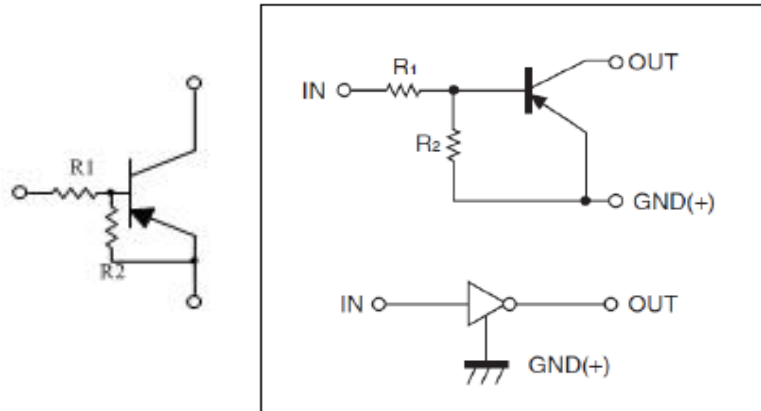


Features

- ◇ 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
DTA124 EM	SOT-723	8K / 7" Reel	RM	RMG	15	M0

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

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Maximum Ratings

Parameter	Symbol	Value					Units
		EM	EE	EUA	ECA	ESA	
Power Dissipation	P_D	100	150	200		300	mW
Supply Voltage	V_{CC}	-50					V
Input Voltage	V_{IN}	-40 ~ +10					V
Output Current	I_O	-30					mA
Junction and Storage Temperature Range	T_J, T_{STG}	- 55 to + 150					°C

Note 1 : Valid provided that electrodes are kept at ambient temperature

Electrical Characteristics

Parameter	Symbol	Min	Typ	Max	Condition	Units
Input Voltage	$V_{I(off)}$	-0.5			$V_{CC} = -5V, I_O = -100\mu A$	V
	$V_{I(on)}$			-3	$V_O = -0.2V, I_O = -5mA$	
Output Voltage	$V_{O(on)}$			-0.3	$I_O / I_I = -10mA / -0.5mA$	V
Input Current	I_I			-0.36	$V_I = -5V$	mA
Output Current	$I_{O(off)}$			-0.5	$V_{CC} = -50V, V_I = 0$	μA
DC Current Gain	G_I	56			$V_O = -5V, I_O = -5mA$	
Input Resistance	R1	15.4	22	28.6		K Ω
Resistance Ratio	R_2/R_1	0.8	1	1.2		
Transition Frequency	f_T		250		$V_O = -10V, I_O = -5mA, f = 100MHz$	MHz

Small Signal Product

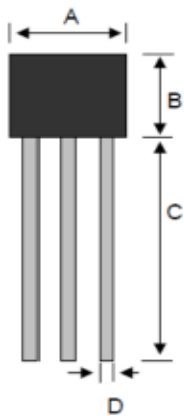
Ordering information (Detail, example)

Part No.	Package	Packing	Packing code	Packing code (Green)	Marking	Manufacture code (Note)
DTA124 EM	SOT-723	8K / 7" Reel	RM	RMG	15	
DTA124 EE	SOT-523	3K / 7" Reel	RN	RNG	15	
DTA124 EUA	SOT-323	3K / 7" Reel	RV	RVG	15	
DTA124 ECA	SOT-23	3K / 7" Reel	RU	RUG	15	
DTA124 ESA	TO-92S	3K / 7" Reel	A3	A3G		
DTA124 EM	SOT-723	8K / 7" Reel	RM	RMG	15	M0
DTA124 EE	SOT-523	3K / 7" Reel	RN	RNG	15	M0
DTA124 EUA	SOT-323	3K / 7" Reel	RV	RVG	15	M0
DTA124 ECA	SOT-23	3K / 7" Reel	RU	RUG	15	M0
DTA124 ESA	TO-92S	3K / 7" Reel	A3	A3G		M0

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

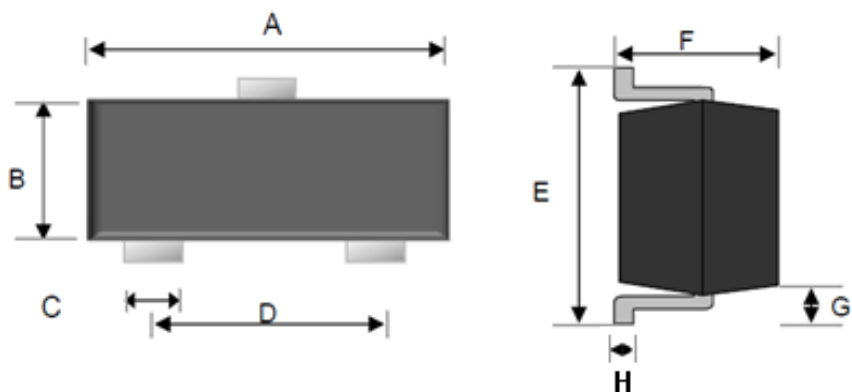
Dimensions

TO-92S



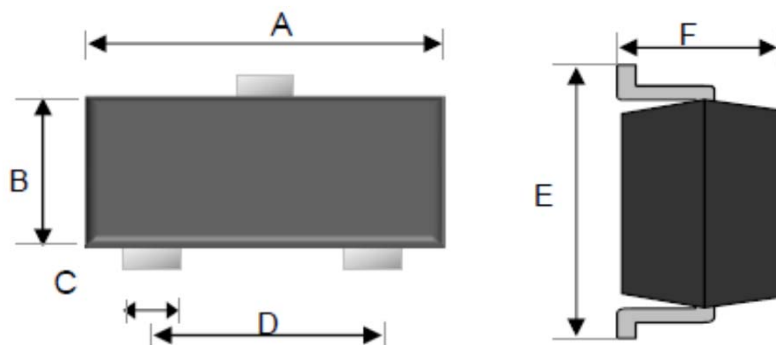
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	3.90	4.10	0.15	0.16
B	3.05	3.25	0.12	0.13
C	15.10	15.50	0.59	0.61
D	0.35	0.48	0.01	0.02
E	1.42	1.62	0.06	0.06
F	0.66	0.86	0.03	0.03
G	0.36	0.51	0.01	0.02

SOT-23



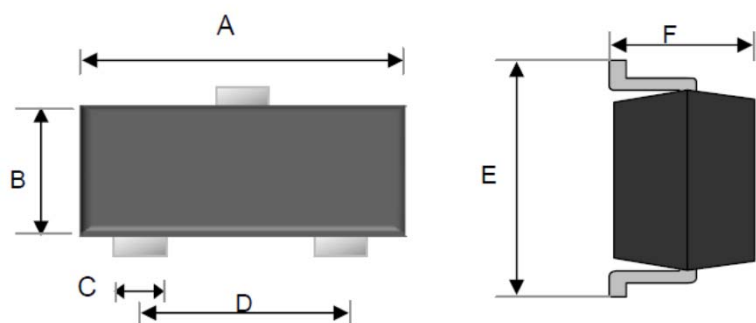
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	2.70	3.10	0.106	0.122
B	1.10	1.50	0.043	0.059
C	0.30	0.51	0.012	0.020
D	1.78	2.04	0.070	0.080
E	2.10	2.64	0.083	0.104
F	0.89	1.30	0.035	0.051
G	0.550 REF		0.022 REF	
H	0.1 REF		0.004 REF	

SOT-323



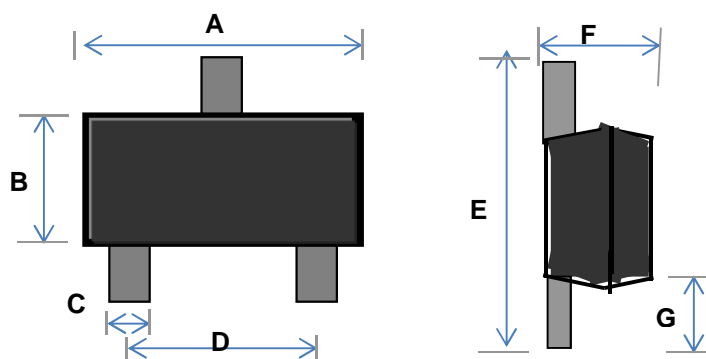
DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.80	2.20	0.07	0.09
B	1.15	1.35	0.05	0.05
C	0.15	0.40	0.01	0.02
D	1.20	1.40	0.05	0.06
E	2.00	2.45	0.08	0.10
F	0.80	1.10	0.03	0.04

SOT-523



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.50	1.70	0.06	0.07
B	0.70	0.90	0.03	0.04
C	0.15	0.35	0.01	0.01
D	0.90	1.10	0.04	0.04
E	1.45	1.75	0.06	0.07
F	0.62	0.95	0.02	0.04

SOT-723



DIM.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.15	1.25	0.045	0.049
B	0.75	0.85	0.030	0.033
C	0.17	0.27	0.007	0.011
D	0.80 TYP.		0.031 TYP.	
E	1.15	1.25	0.045	0.049
F	0.43	0.55	0.017	0.022
G	0.15	0.25	0.006	0.010