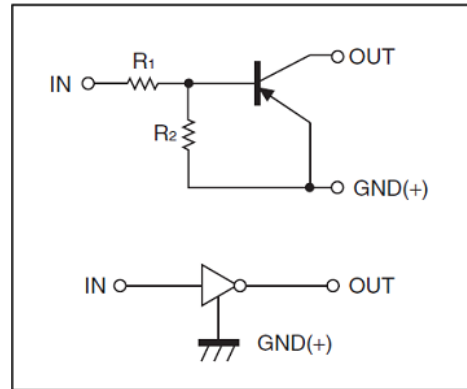


Small Signal Product

PNP Small Signal Transistor

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.
- Packing code with suffix "G" means green compound (halogen-free)



Equivalent Circuit

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T _A =25°C unless otherwise noted)				
PARAMETER	SYMBOL	VALUE		UNIT
		XM	XSA	
Power Dissipation	P _D	100	300	mW
Supply Voltage	V _{CC}	-50		V
Input Voltage	V _{IN}	-20 ~ +7		V
Output Current	I _O	-100		mA
Junction and Storage Temperature Range	T _J , T _{STG}	-55 to + 150		°C

PARAMETER	SYMBOL	MIN	TYP	MAX	CONDITION	UNIT
Input Voltage	V _{I(off)}	-0.3			V _{CC} = -5V, I _O = -100μA	V
	V _{I(on)}			-2.5	V _O = -0.3V, I _O = -20mA	
Output Voltage	V _{O(on)}		-0.1	-0.3	I _O / I _I = -10mA / -0.5mA	V
Input Current	I _I			-1.8	V _I = -5V	mA
Output Current	I _{O(off)}			-0.5	V _{CC} = -50V, V _I =0	μA
DC Current Gain	G ₁	30			V _O = -5V, I _O = -10mA	
Input Resistance	R ₁	3.29	4.7	6.11		KΩ
Resistance Ratio	R ₂ /R ₁	1.7	2.1	2.6		
Transition Frequency	f _T		250		V _O = -10V, I _O = 5mA, f=100MHz	MHz

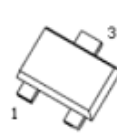

Small Signal Product

ORDERING INFORMATION				
PART NO.	PACKING CODE	PACKING CODE SUFFIX (*)	PACKAGE	PACKING
DTA143XM	RM	G	SOT-723	8K / 7" Reel
DTA143XSA	A3		TO-92S	3K / Box (Ammo)
	B3			10K / Box (Bulk)

*: Optional available

EXAMPLE				
PREFERRED P/N	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
DTA143XM RMG	DTA143XM	RM	G	Green compound

PIN CONNENCTIONS AND MARKING

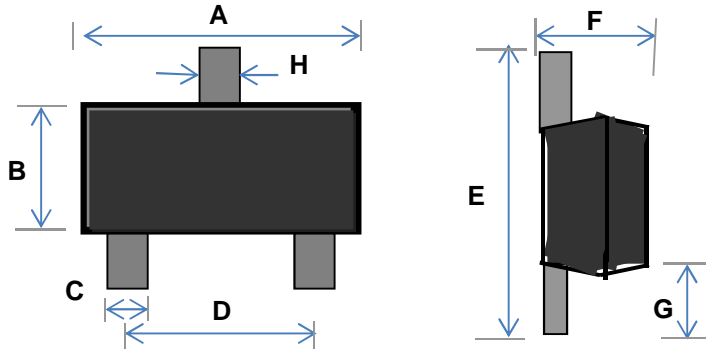
DTA143XM	SOT-723	DTA143XSA	TO-92S
 <p>MARKING:33</p>	<p>1. IN 2. GND 3. OUT</p>	 <p>MARKING: A143 X041 MARKING (HF): A143 X-041</p>	<p>1. GND 2. OUT 3. IN</p>

Not Recommended

Small Signal Product

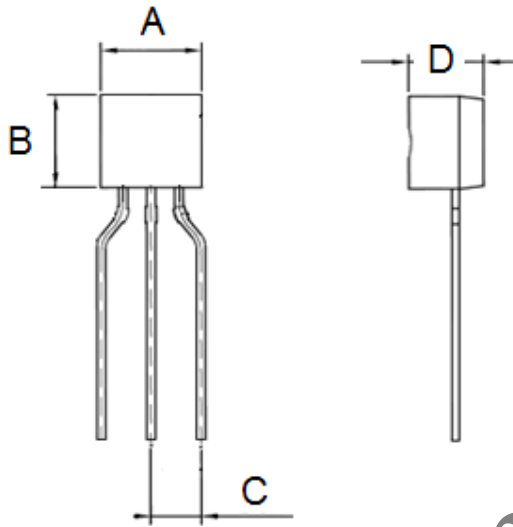
PACKAGE OUTLINE DIMENSION

SOT-723



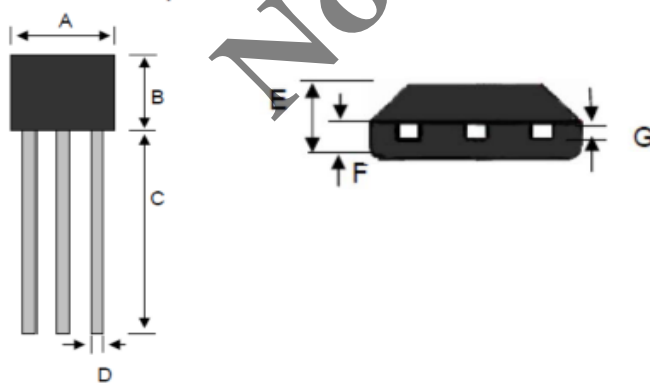
DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	1.15	1.25	0.045	0.049
B	0.75	0.85	0.030	0.033
C	0.15	0.27	0.006	0.011
D	0.80 TYP.		0.031 TYP.	
E	1.15	1.25	0.045	0.049
F	0.43	0.55	0.017	0.022
G	0.15	0.25	0.006	0.010
H	0.25	0.37	0.010	0.015

TO-92S (Ammo)



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.90	4.10	0.154	0.161
B	3.05	3.25	0.120	0.128
C	2.20	2.80	0.087	0.110
D	1.42	1.62	0.056	0.064

TO-92S (Bulk)



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	3.90	4.10	0.154	0.161
B	3.05	3.25	0.120	0.128
C	15.10	15.50	0.594	0.610
D	0.35	0.48	0.014	0.019
E	1.42	1.62	0.056	0.064
F	0.66	0.86	0.026	0.034
G	0.36	0.51	0.014	0.020

Not Recommended

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