

Features

- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

NPN Digital Transistor

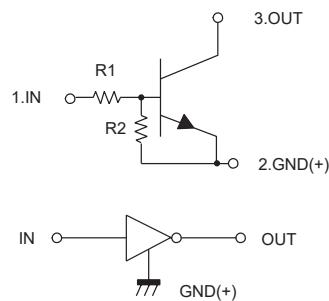
Maximum Ratings @ 25°C Unless Otherwise Specified

- Thermal Resistance: 1250°C/W Junction to Ambient

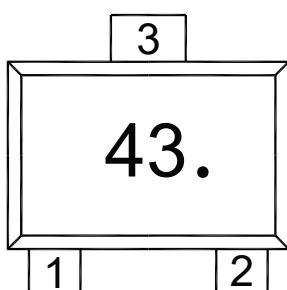
Parameter	Symbol	Value	Unit
Supply Voltage	V _{CC}	50	V
Input Voltage	V _{IN}	-7~+20	V
Output Current	I _O	100	mA
Power Dissipation	P _D	100	mW
Junction Temperature	T _J	-55~+150	°C
Storage Temperature	T _{stg}	-55~+150	°C

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

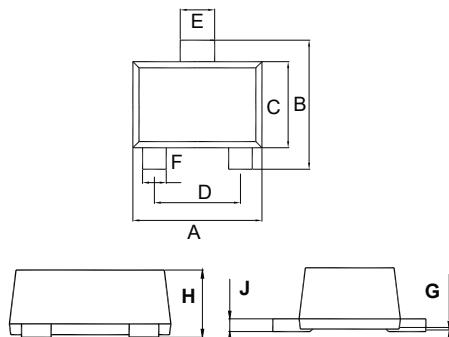
Internal Structure



Marking Code



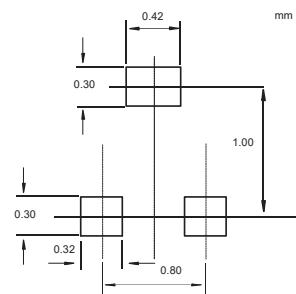
SOT-723



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.043	0.051	1.10	1.30	
B	0.043	0.051	1.10	1.30	
C	0.028	0.035	0.70	0.90	
D	0.031		0.80		TYP.
E	0.009	0.017	0.22	0.42	
F	0.005	0.013	0.12	0.32	
G	0.000	0.002	0.00	0.05	
H	0.017	0.021	0.43	0.54	
J	0.003	0.006	0.08	0.15	

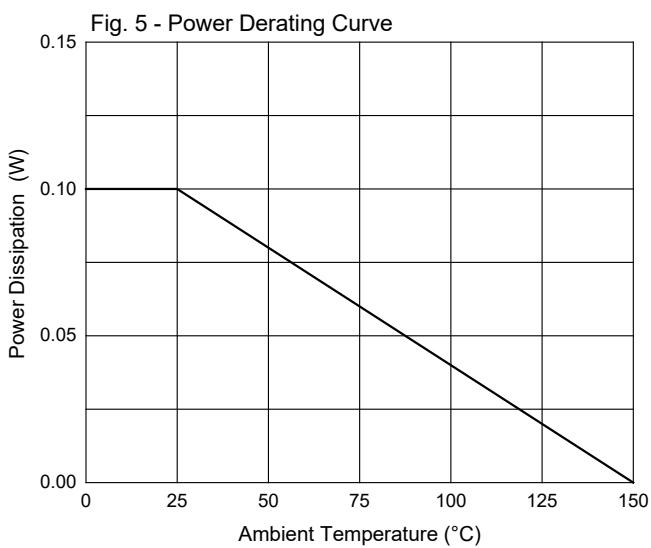
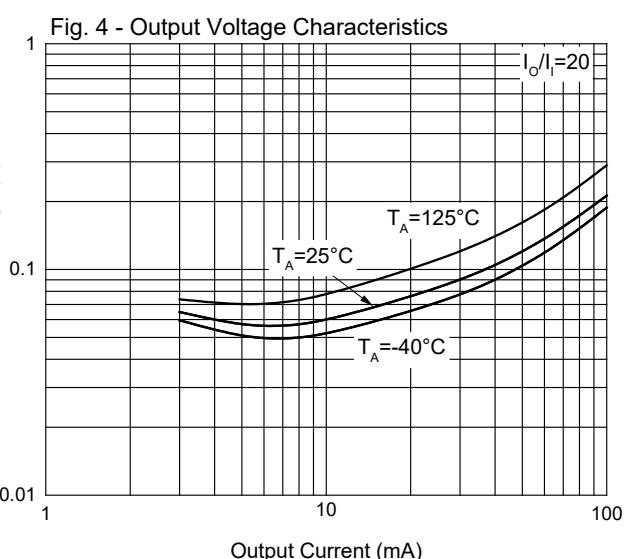
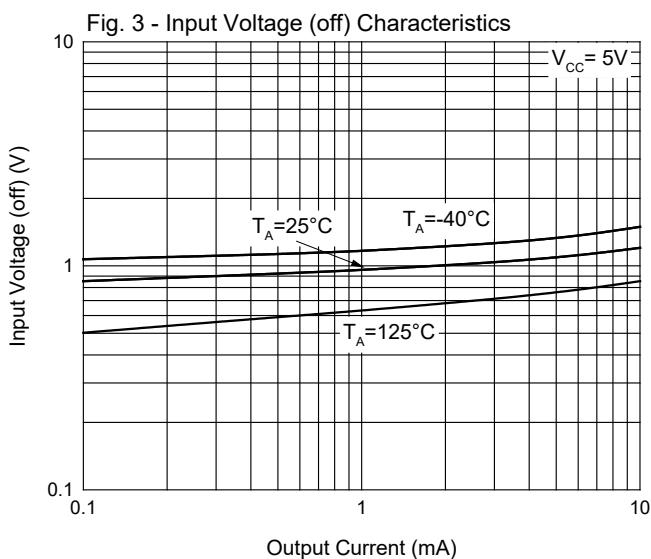
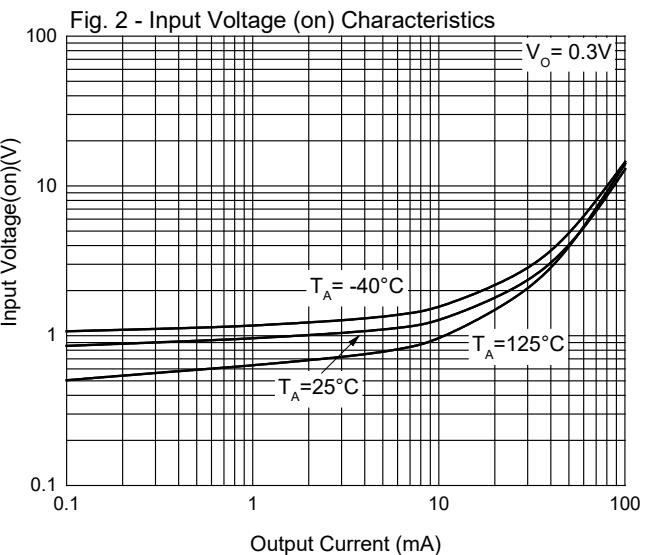
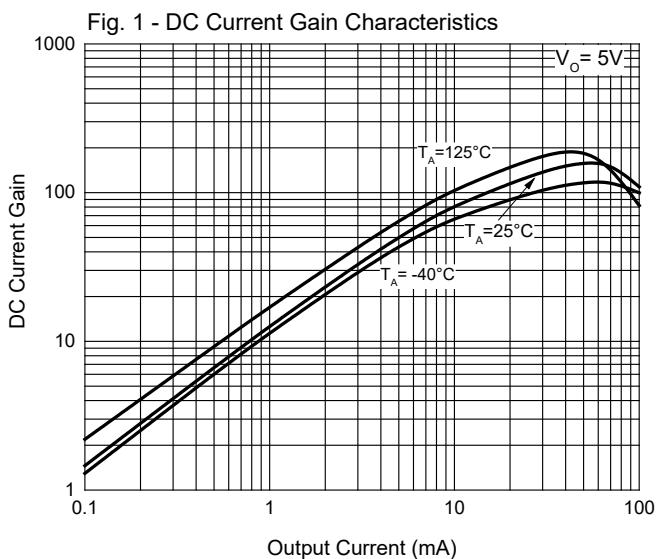
Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(\text{off})}$	0.3	---	---	V	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(\text{on})}$	---	---	2.5	V	$V_O=0.3V, I_O=20mA$
Output Voltage	$V_{O(\text{on})}$	---	---	0.3	V	$I_O=10mA, I_I=0.5mA$
Input Current	I_I	---	---	1.8	mA	$V_I=5V$
Output Current	$I_{O(\text{off})}$	---	---	0.5	μA	$V_{CC}=50V, V_I=0$
DC Current Gain	G_I	30	---	---		$V_O=5V, I_O=10mA$
Input Resistance	R_I	3.29	4.7	6.11	$K\Omega$	
Resistance Ratio	R_2/R_1	1.7	2.1	2.6		
Transition Frequency	f_T	---	250	---	MHz	$V_O=10V, I_O=5mA, f=100MHz$

Curve Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:8Kpcs/Reel

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