

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)

Maximum Ratings @ 25°C Unless Otherwise Specified

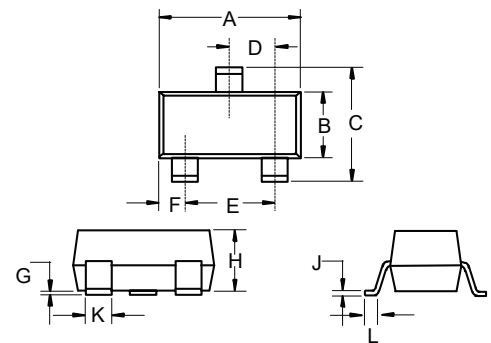
- Thermal Resistance: 625°C/W Junction to Ambient

Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	-10~+40	V
Output Current	I_O	100	mA
Power Dissipation	P_D	200	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.

NPN Digital Transistor

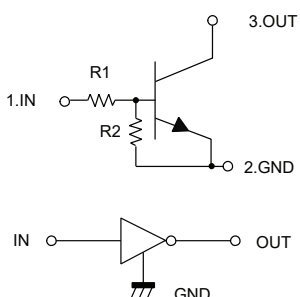
SOT-323



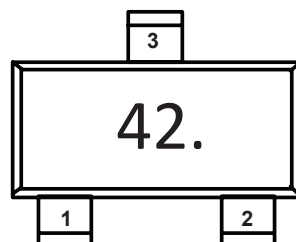
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026		0.65		TYP.
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	
L	0.010	0.018	0.26	0.46	

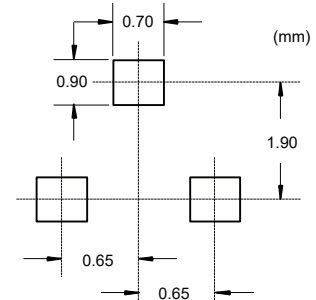
Internal Structure



Marking Code



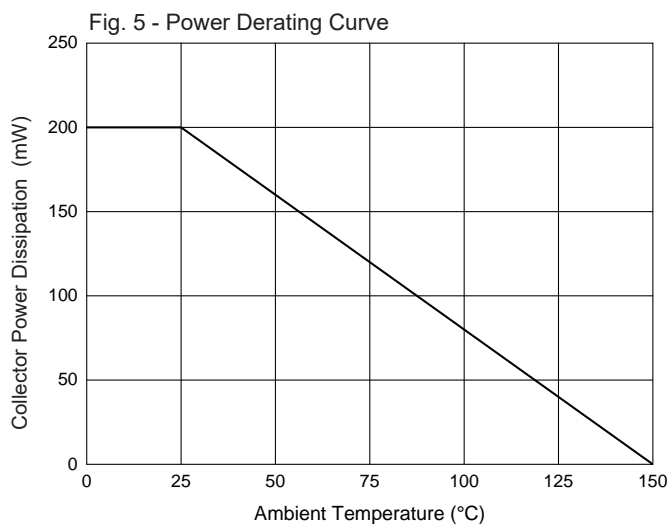
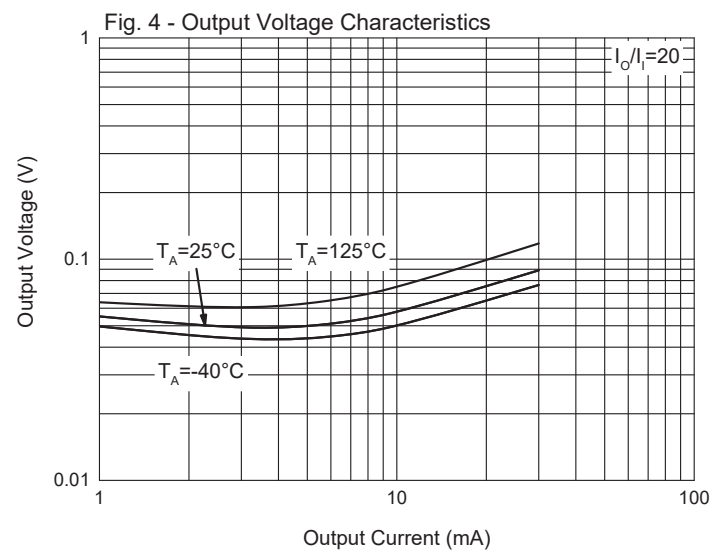
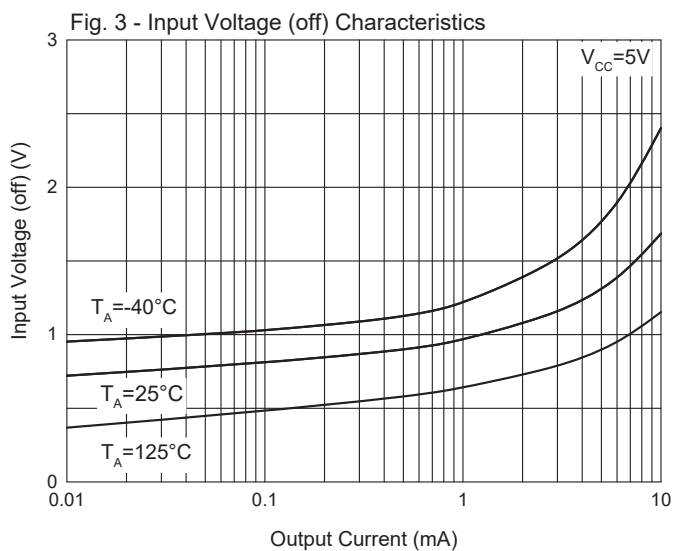
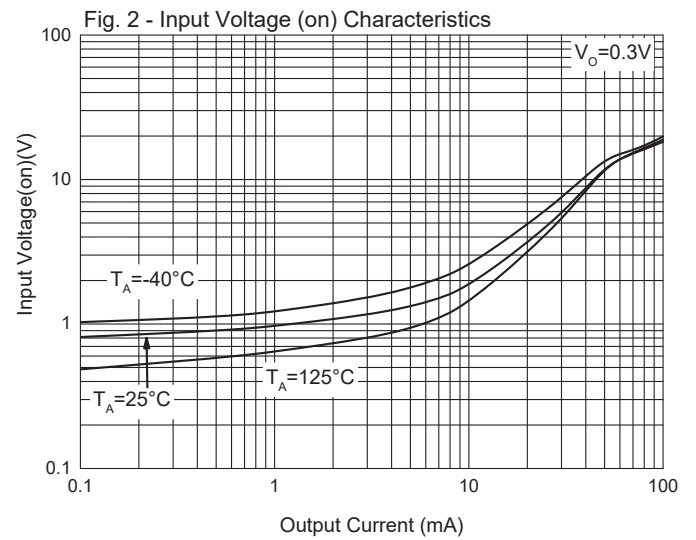
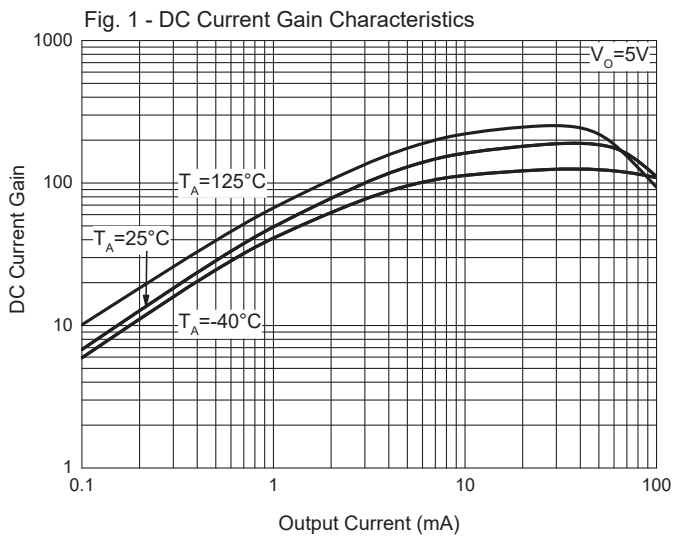
Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(off)}$	0.4			V	$V_{CC}=5V, I_O=100\mu A$
	$V_{I(on)}$			2.5	V	$V_O=0.3V, I_O=2mA$
Output Voltage	$V_{O(on)}$			0.3	V	$I_O=10mA, I_I=0.5mA$
Input Current	I_I			360	μA	$V_I=5V$
Output Current	$I_{O(off)}$			0.1	μA	$V_{CC}=50V, V_I=0$
DC Current Gain	G_I	68				$V_O=5V, I_O=5mA$
Input Resistance	R_1	15.4	22	28.6	K Ω	
Resistance Ratio	R_2/R_1	1.7	2.1	2.6		
Transition Frequency	f_T	200			MHz	$V_O=10V, I_O=5mA, f=100MHz$

Curve Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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