

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)

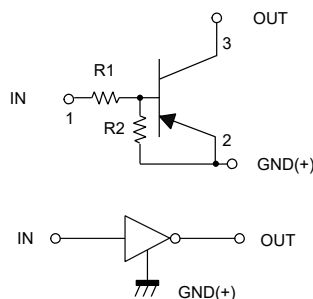
Maximum Ratings @ 25°C Unless Otherwise Specified

- Thermal Resistance: 833°C/W Junction to Ambient

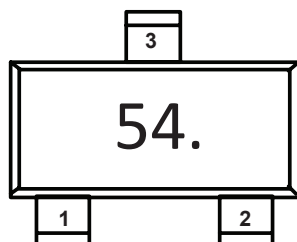
Parameter	Symbol	Value	Unit
Supply Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40~+6	V
Output Current	I_O	-100	mA
Power Dissipation	P_D	150	mW
Junction Temperature	T_J	-55~+150	°C
Storage Temperature	T_{stg}	-55~+150	°C

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

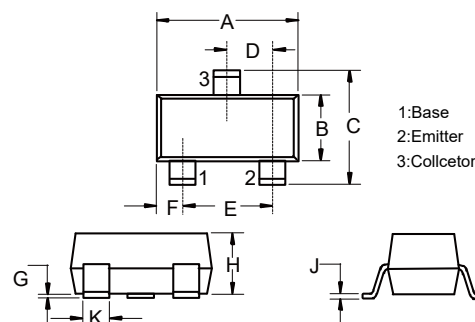


Marking Code



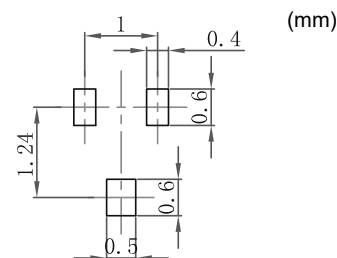
PNP Digital Transistor

SOT-523



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020		0.50		TYP.
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.024	0.031	0.60	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	

Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(off)}$	-0.3			V	$V_{CC} = -5V, I_O = -100\mu A$
	$V_{I(on)}$			-1.4	V	$V_O = -0.3V, I_O = -1mA$
Output Voltage	$V_{O(on)}$			-0.3	V	$I_O = -5mA, I_I = -0.25mA$
Input Current	I_I			-0.88	mA	$V_I = -5V$
Output Current	$I_{O(off)}$			-0.5	μA	$V_{CC} = -50V, V_I = 0$
DC Current Gain	G_I	68				$V_O = -5V, I_O = -5mA$
Input Resistance	R_I	7	10	13	K Ω	
Resistance Ratio	R_2/R_1	3.7	4.7	5.7		
Transition Frequency	f_T	200			MHz	$V_O = -10V, I_O = -5mA, f = 1MHz$

Curve Characteristics

Fig. 1 - DC Current Gain Characteristics

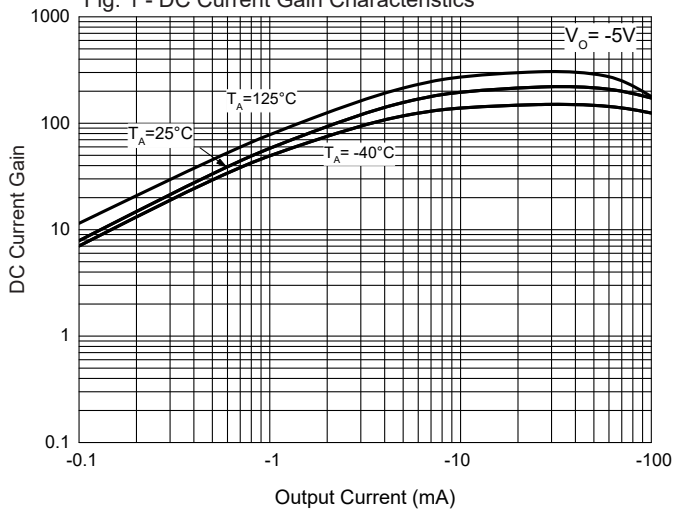


Fig. 2 - Input Voltage (on) Characteristics

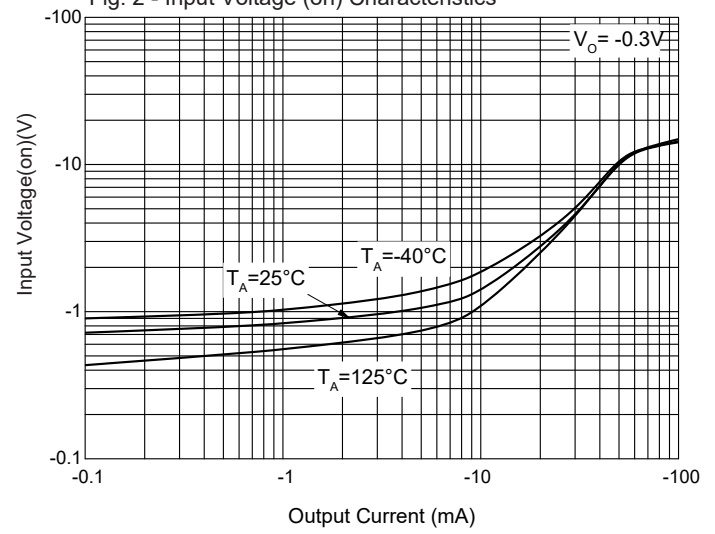


Fig. 3 - Input Voltage (off) Characteristics

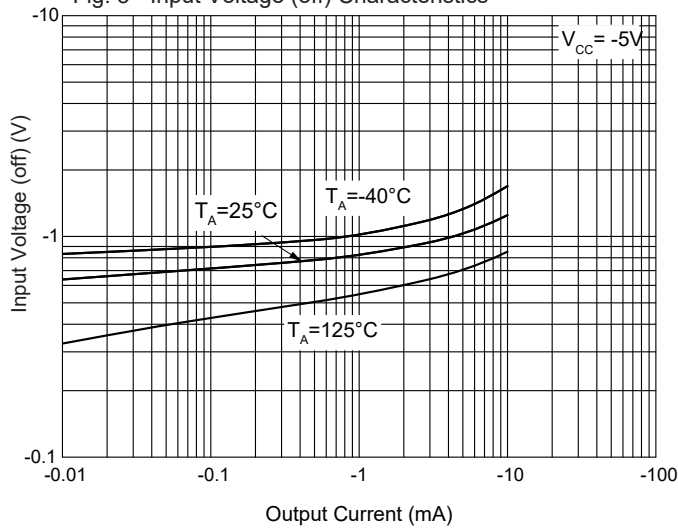


Fig. 4 - Output Voltage Characteristics

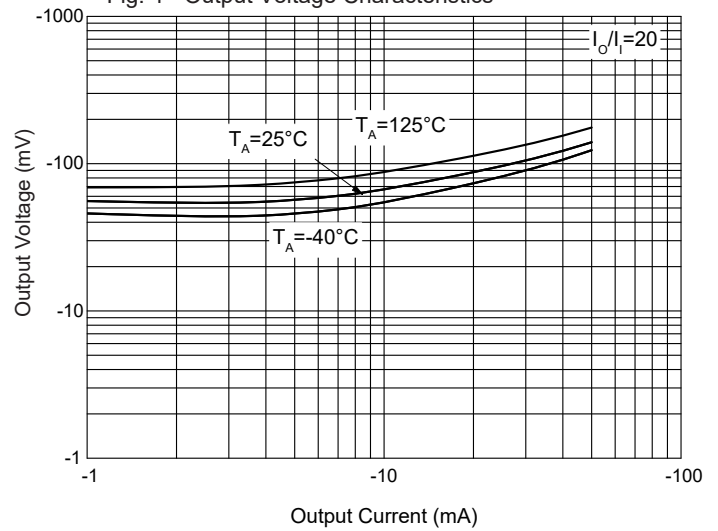
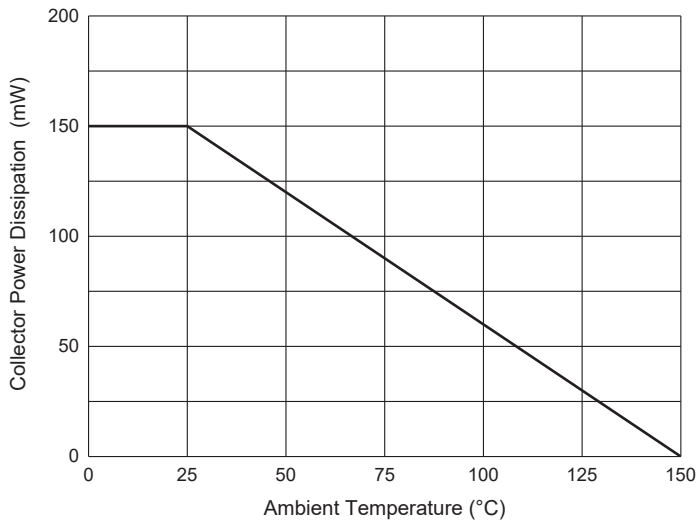


Fig. 5 - Power Derating Curve



Ordering Information

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

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