·M·C·C·
Micro Commercial Components

Features

- Epitaxial Planar Die Construction

- Built-In Biasing Resistors

- Halogen Free. "Green" Device (Note 1)

- Moisture Sensitivity Level 1

- Epoxy Meets UL 94 V-0 Flammability Rating

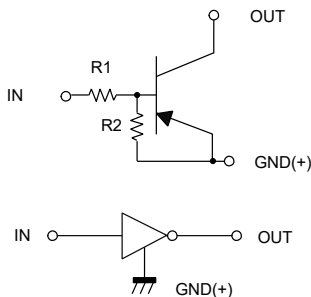- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant.See Ordering Information)

PNP Digital Transistor

Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Unit
Supply Voltage	V_{CC}	---	-50	---	V
Input Voltage	V_{IN}	-12	---	5	V
Output Current	I_O	---	-100	---	mA
	$I_{C(Max)}$	---	-100	---	mA
Power Dissipation	P_D	---	200	---	mW
Junction Temperature	T_J	---	---	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.
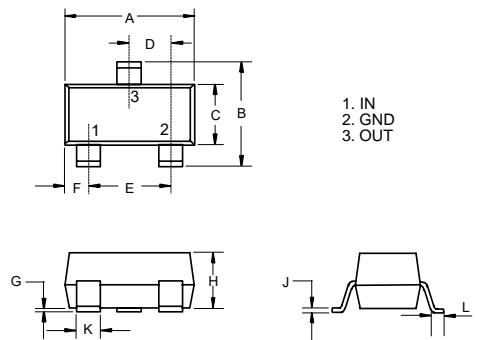
Device Marking：E32

Internal Structure

SOT-23

1. IN
2. GND
3. OUT

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.110	0.120	2.80	3.04	
B	0.083	0.104	2.10	2.64	
C	0.047	0.055	1.20	1.40	
D	0.034	0.041	0.85	1.05	
E	0.067	0.083	1.70	2.10	
F	0.018	0.024	0.45	0.60	
G	0.0004	0.006	0.01	0.15	
H	0.035	0.043	0.90	1.10	
J	0.003	0.007	0.08	0.18	
K	0.012	0.020	0.30	0.51	
L	0.007	0.020	0.20	0.50	

Suggested Solder Pad Layout

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Input Voltage	$V_{I(off)}$	-0.5	---	---	V	V_{CC}=-5V, I_O=-100µA
	$V_{I(on)}$	---	---	-1.1	V	V_O=-0.3V, I_O=-5mA
Output Voltage	$V_{O(on)}$	---	---	-0.3	V	I_O=-5mA,I_I=-0.25mA
Input Current	I_I	---	---	-3.6	mA	V_I=-5V
Output Current	$I_{O(off)}$	---	---	-0.5	µA	V_{CC}=-50V, V_I=0
DC Current Gain	G_I	80	---	---		V_O=-5V, I_O=-10mA
Input Resistance	R_1	1.54	2.2	2.86	KΩ	
Resistance Ratio	R_2/R_1	17	21	26		
Transition Frequency	f_T	---	250	---	MHz	V_{CE}=-10V, I_E=5mA, f=100MHz

Curve Characteristics
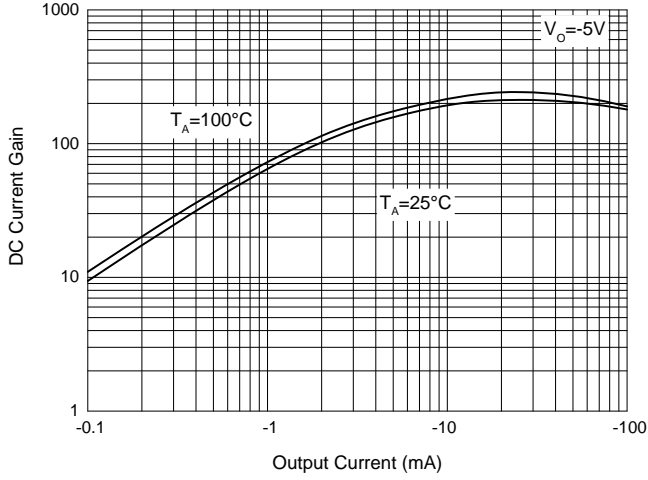
Fig. F - DC Current Gain Characteristics

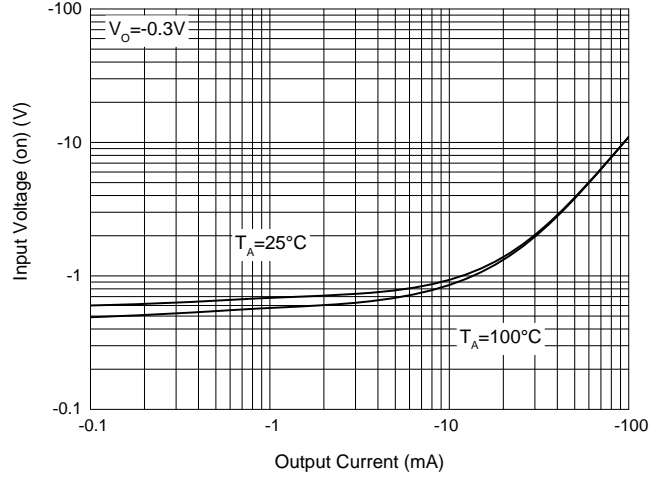Fig. G- Input Voltage (on) Characteristics
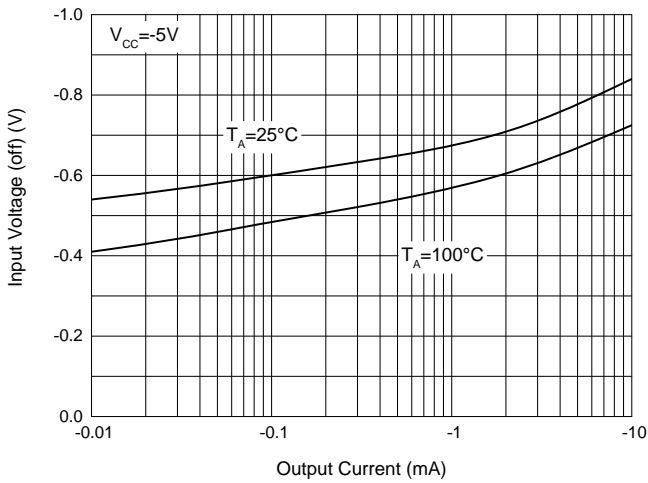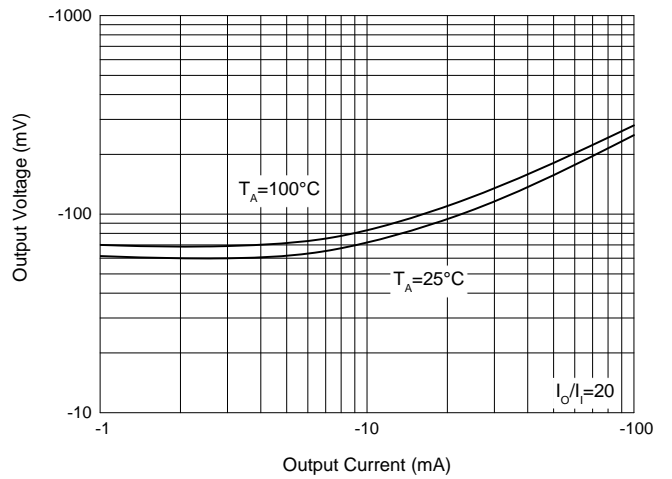

Fig. H- Input Voltage (off) Characteristics

Fig. I - Output Voltage Characteristics

Fig. Í - Power Derating Curve