

## Features

- **Pb-Free package is available**  
RoHS product for packing code suffix "G"  
Halogen free product for packing code suffix "H"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Built-in bias resistors enable the configuration of an inverter circuit without connecting external input resistors
- 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, making device design easy

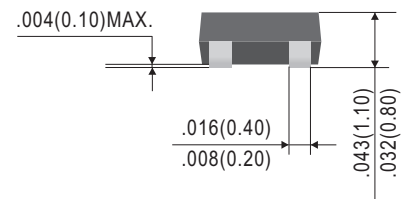
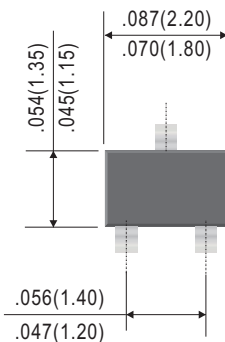
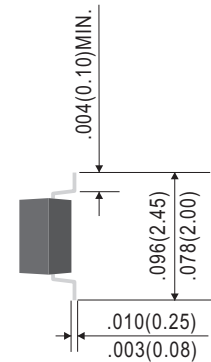
### Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
$V_{CC}$	Supply voltage	---	-50	---	V
$V_{IN}$	Input voltage	-40	---	10	V
$I_O$	Output current	---	-30	---	mA
$I_{C(MAX)}$	Output current	---	-100	---	mA
$P_d$	Power dissipation	---	200	---	mW
$T_j$	Junction temperature	---	150	---	°C
$T_{stg}$	Storage temperature	-55	---	150	°C

### Electrical Characteristics @ 25°C

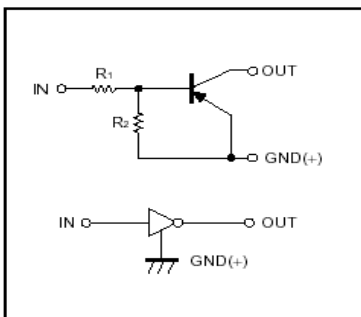
Symbol	Parameter	Min	Typ	Max	Unit
$V_{I(off)}$	Input voltage ( $V_{CC}=-5V, I_O=-100 \mu A$ )	-0.5	---	---	V
$V_{I(on)}$	Input voltage ( $V_O=-0.2V, I_O=-5mA$ )	---	---	-3.0	V
$V_{O(on)}$	Output voltage ( $I_O/I_I=-10mA/-0.5mA$ )	---	---	-0.3	V
$I_I$	Input current ( $V_I=-5V$ )	---	---	-0.36	mA
$I_{O(off)}$	Output current ( $V_{CC}=-50V, V_I=0$ )	---	---	-0.5	$\mu A$
$G_1$	DC current gain ( $V_O=-5V, I_O=-5mA$ )	56	---	---	
$R_1$	Input resistance	15.4	22	28.6	K $\Omega$
$R_2/R_1$	Resistance ratio	0.8	1.0	1.2	
$f_T$	Transition frequency ( $V_O=-10V, I_O=5mA, f=100MHz$ )	---	250	---	MHz

## SOT-323



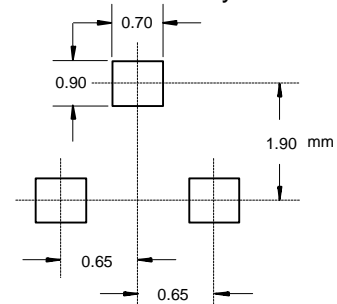
Dimensions in inches and (millimeters)

### Equivalent circuit



\*Marking: 15

### Suggested Solder Pad Layout



● **Electrical characteristic curves**

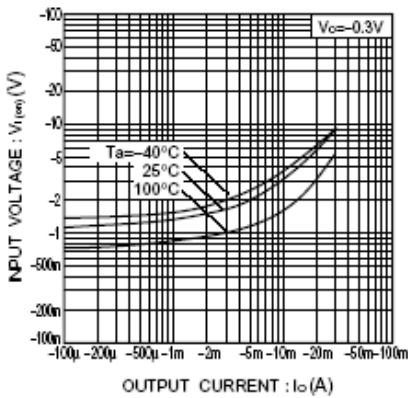


Fig.1 Input voltage vs. output current (ON characteristics)

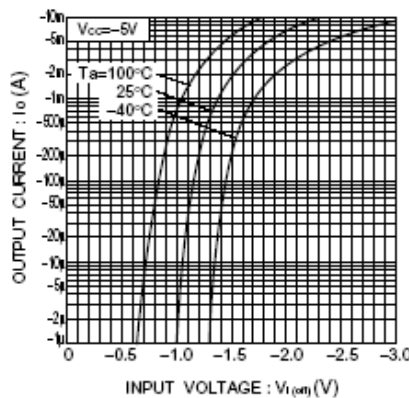


Fig.2 Output current vs. input voltage (OFF characteristics)

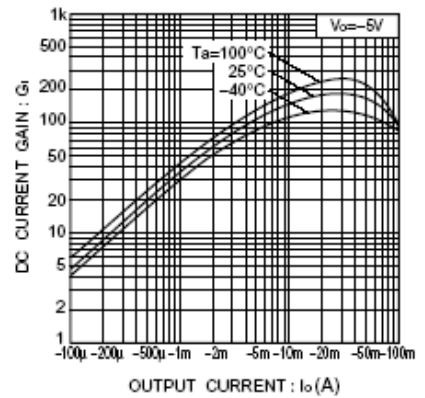


Fig.3 DC current gain vs. output current

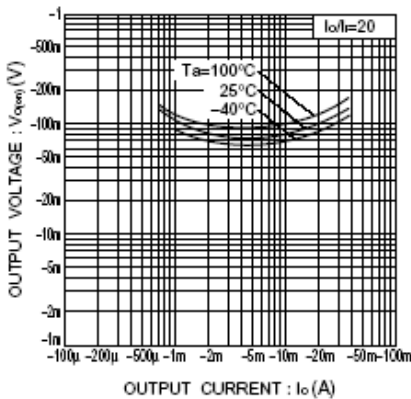


Fig.4 Output voltage vs. output current