

Features

- Epitaxial Planar Die Construction
- Complementary NPN Types Available
- Built-In Biasing Resistors
- **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

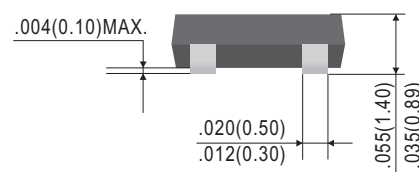
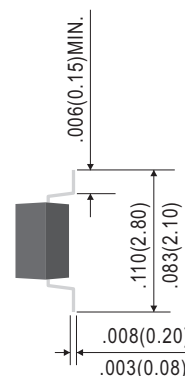
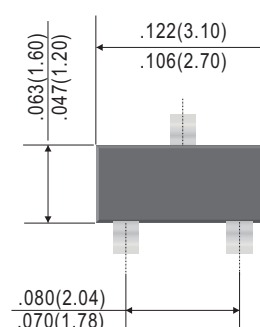
Absolute maximum ratings @ 25°C

Symbol	Parameter	Min	Typ	Max	Unit
V_{CC}	Supply voltage	---	50	---	V
V_{IN}	Input voltage	-5	---	+12	V
P_d	Power dissipation	---	200	---	mW
T_j	Junction temperature	---	150	---	°C
T_{stg}	Storage temperature	-55	---	150	°C
I_O	Output current	---	100	---	mA
$I_{C(MAX)}$		---	100	---	

Electrical Characteristics @ 25°C

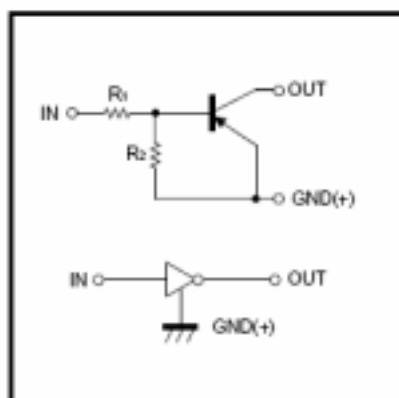
Symbol	Parameter	Min	Typ	Max	Unit
$V_{I(off)}$	Input voltage ($V_{CC}=5V$, $I_O=100\mu A$)	0.5	---	---	V
$V_{I(on)}$	Input voltage ($V_O=0.3V$, $I_O=5mA$)	---	---	1.1	V
$V_{O(on)}$	Output voltage ($I_O=5mA$, $I_i=0.25mA$)	---	0.1	0.3	V
I_i	Input current ($V_i=5V$)	---	---	3.6	mA
$I_{O(off)}$	Output current ($V_{CC}=50V$, $V_i=0$)	---	---	0.5	μA
G_i	DC current gain ($V_O=5V$, $I_O=10mA$)	80	---	---	
R_1	Input resistance	1.54	2.2	2.86	K Ω
R_2/R_1	Resistance ratio	17	21	26	
f_T	Transition frequency ($V_O=10V$, $I_O=5mA$, $f=100MHz$)	---	250	---	MHz

SOT-23



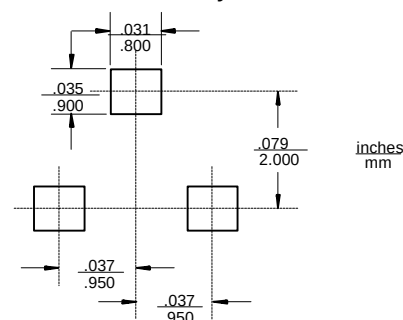
Dimensions in inches and (millimeters)

Equivalent circuit



*Marking: E32

Suggested Solder Pad Layout



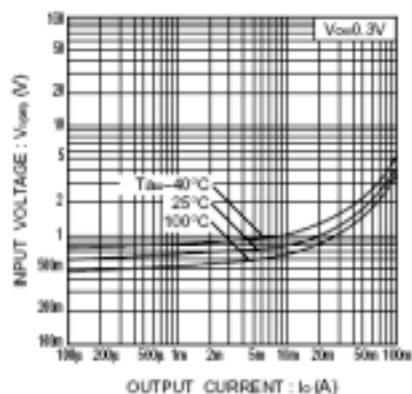


Fig.1 Input voltage vs. output current (ON characteristics)

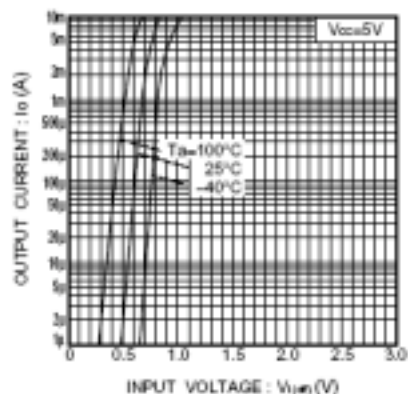


Fig.2 Output current vs. input voltage (OFF characteristics)

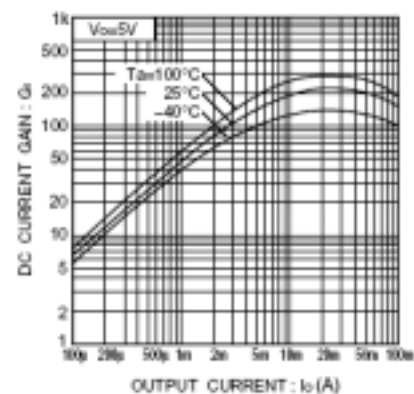


Fig.3 DC current gain vs. output current

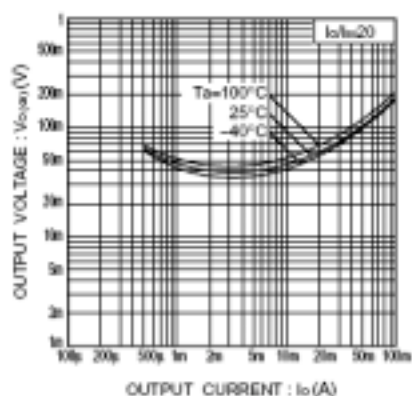


Fig.4 Output voltage vs. output current

Ordering Information:

Device PN	Packing
DTA123JCA –T ⁽¹⁾ G ⁽²⁾ -WS	Tape& Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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