

BRDTA144EUAQ

Rev.A Mar.-2023



DATA SHEET

SOT-323

PNP

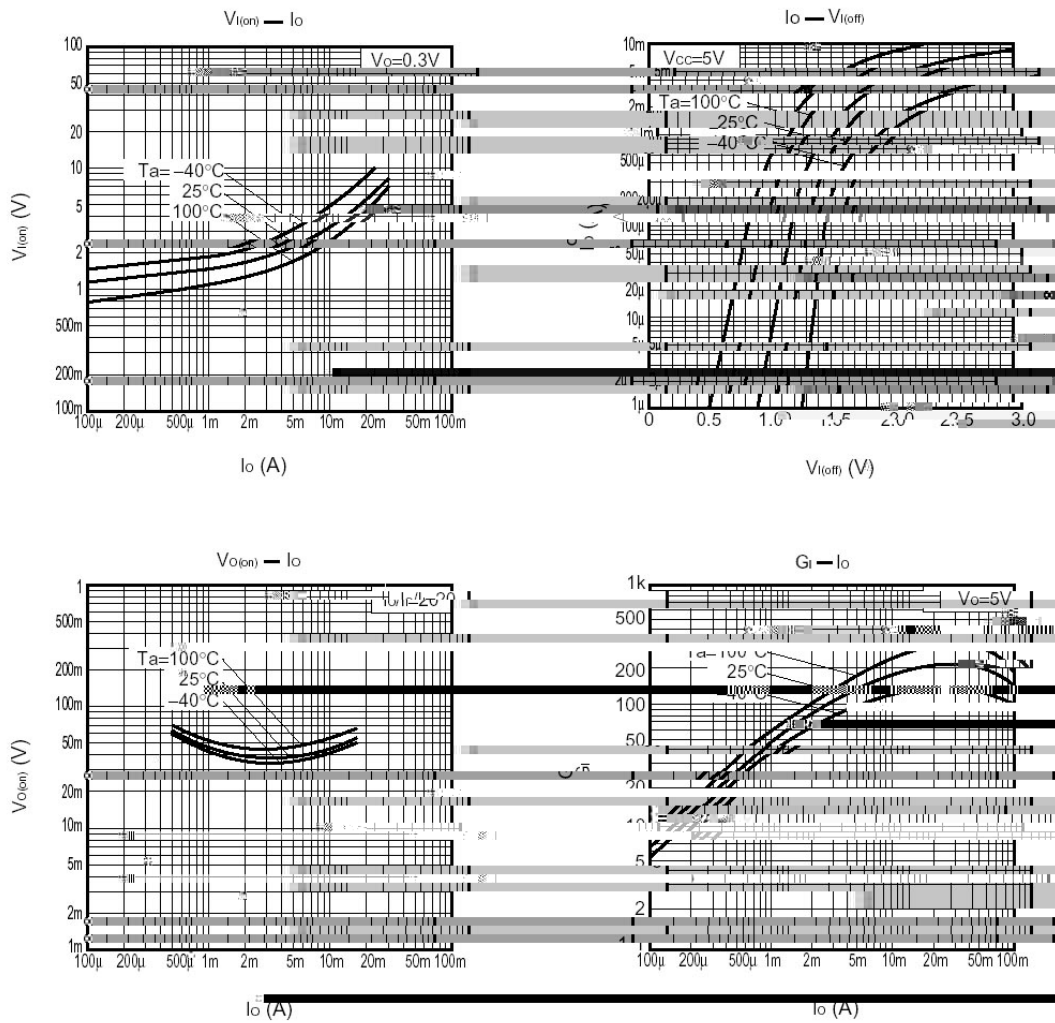
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-40	V
		10	V
Output Current	I_C	-100	mA
	I_O	-30	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

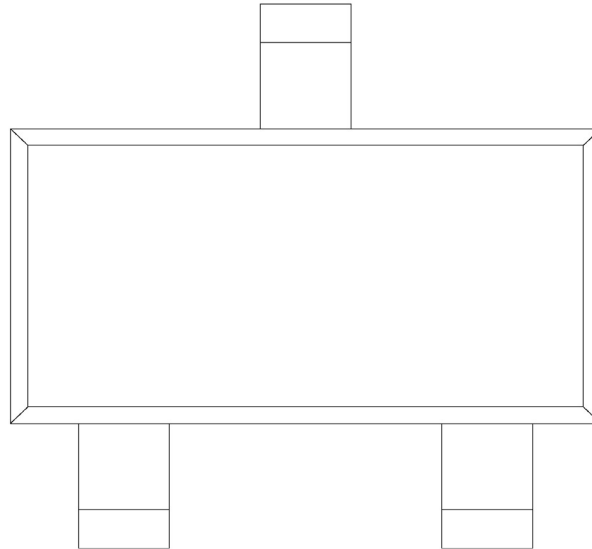
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	$V_{I(off)}$	$V_{CC}=-5.0V$ $I_O=-100\mu A$			-0.5	V
	$V_{I(on)}$	$V_O=-0.3V$ $I_O=-2.0mA$	-3.0			V
Output Voltage	$V_{O(on)}$	$I_O=-10mA$ $I_I=-0.5mA$		-0.1	-0.3	V
Input Current	I_I	$V_I=-5.0V$			-0.18	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=-50V$ $V_I=0V$			-0.5	μA
DC Current Gain	G_I	$V_O=-5.0V$ $I_O=-5.0mA$	68			
Transition Frequency	f_T	$V_{CE}=-10V$ $I_E=5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		32.9	47	61.1	K Ω
Resistance Ratio	R_2/R_1		0.8	1.0	1.2	

/ Electrical Characteristic Curve





/ Marking Instructions



Q

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Note:

Q: Automobile halogen-free product Code

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() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | |
|---|--------------|--------------|---|
| 1 | 150 ~ 200℃ | 60 ~ 120sec; | 1.Preheating:150~200℃, Time:60~120sec. |
| 2 | 255 ± 5℃ | 5 ± 0.5sec; | 2.Peak Temp.:255 ± 5℃, Duration:5 ± 0.5sec. |
| 3 | 2 ~ 10℃/sec. | | 3. Cooling Speed: 2~10℃/sec. |

/ Resistance to Soldering Heat Test Conditions

260 ± 5℃	10 ± 1 sec.	Temp:260±5	Time:10±1 sec
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/ Packaging SPEC.

/ REEL

Package Type	Units	Dimension	(unit mm ³)
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