

BRDTA144EUAQ

Rev.A Mar.-2023



DATA SHEET

SOT-323

PNP

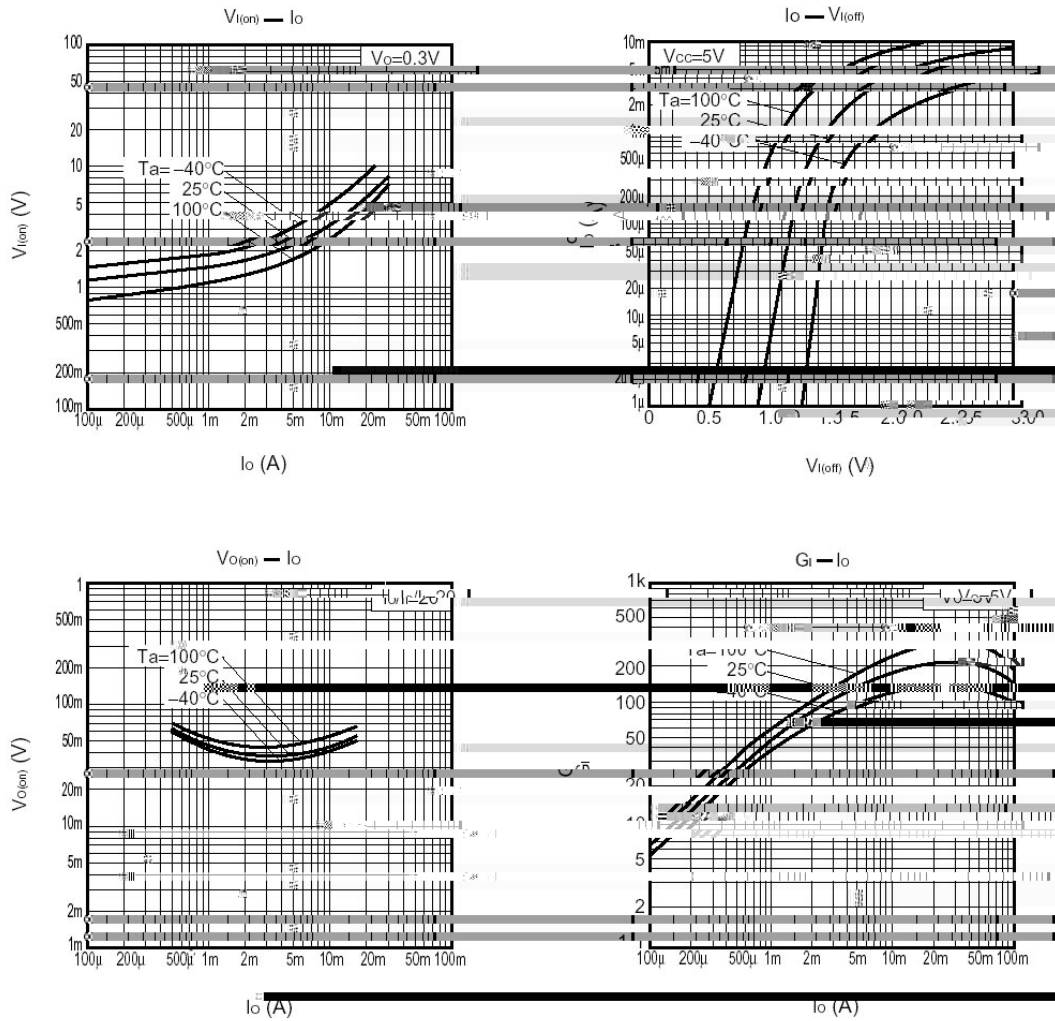
/ Absolute Maximum Ratings(Ta=25)

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)

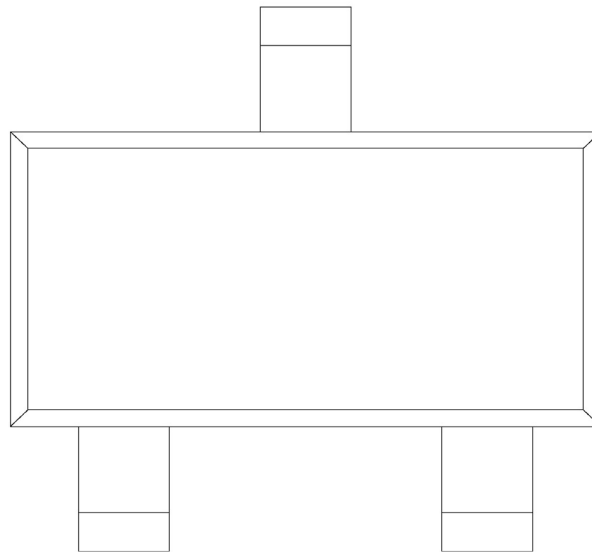
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage	V _{I(off)}	V _{CC} =-5.0V I _O =-100 A			-0.5	V
	V _{I(on)}	V _O =-0.3V I _O =-2.0mA	-3.0			V
Output Voltage	V _{O(on)}	I _O =-10mA I _I =-0.5mA		-0.1	-0.3	V
Input Current	I _I	V _I =-5.0V			-0.18	mA
Output Cut-off Current	I _{O(off)}	V _{CC} =-50V V _I =0V			-0.5	A
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
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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