

BRDTC123YKAQ

Rev.A Mar.-2025

/ Descriptions

J F K\$) * E GE J`cZf e`E GE ; ^`kXcki Xej`j kf i`e X`JF K\$) * `GdXj kZ`GXZbX^`%

/ Features

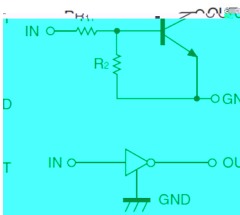
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With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

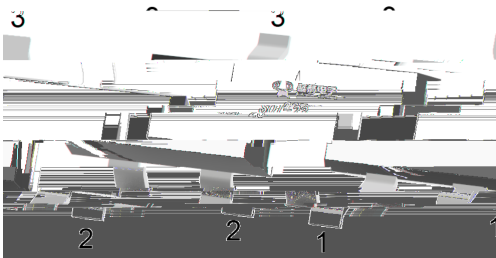
/ Applications

Switching applications, interface circuit and driver circuit applications, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning



PIN 1 IN PIN 2 GND PIN 3 OUT

/ hFE Classifications & Marking

Marking	Q62
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/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Supply Voltage	V _{CC}	50	V
Input Voltage	V _{IN}	12	V
		-5	V
Output Current	I _O	100	mA
Power Dissipation	P _D	200	mW
Junction Temperature	T _j	-55 150	
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 =100μA	0.3			V
Input Voltage	V _{I(on)}	V _O =0.3V I _O =20mA			3	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			3.8	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 =10mA	33			
Resistance1	R ₁		1.54	2.2	2.86	K
Resistance Ratio	R ₂ /R ₁		3.6	4.5	5.5	
Transition Frequency	f _T	V _O =10V I _O =5.0mA f=100MHz		250		MHz

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DATA SHEET

/ Electrical Characteristic Curve

Ø □ =) φ / Package Dimensions

, M y f / Marking Instructions

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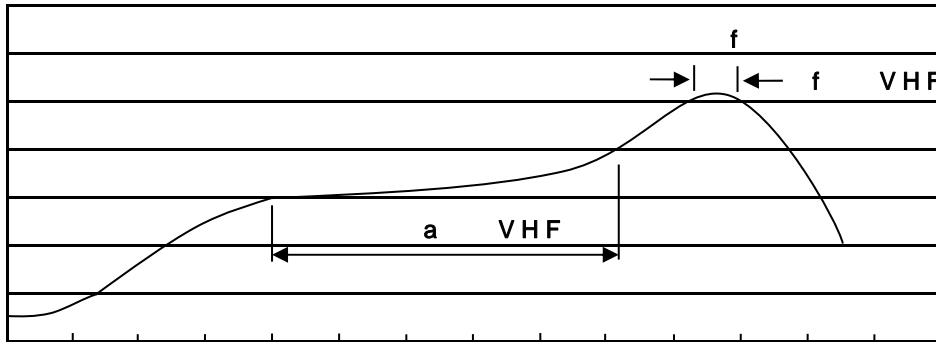
Note:

Q: Automobile halogen-free product Code

62 y Product Type Code

šWD t...•Žç (x/) / :KSVKXGZ[XK 6XULORK LUX /8 8KLRU] 9URJKXOTM 6

7HPSHUDWXUH



7LPH VHF

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Note:

- 1o• Ä ½ “ † 150 ½200 - k ž • 60 ½120sec; 1.Preheating:150~200 - , Time:60~120sec.
- 2o• Q › “ † 255 r5 - k ž • 4 Ò 5 r0.5sec; 2.Peak Temp.:255 r5 - , Duration:5 r0.5sec.
- 3o•D N ò i Ò 0 , † 2 ½10 - /sec. 3. Cooling Speed: 2~10 - /sec.

ÂD /Cã p ~ »] / Resistance to Soldering Heat Test Conditions

“ † y 260 r5 - ž • y 10 r1 sec. Temp.:260±5 Time:10±1 sec

G P á / Packaging SPEC.

2 & x / REEL

Package Type 7>û ~ E	Units ;>û !H					Dimension ;>û p . (unit Åmm³)		
	Units/Reel /--	Reels/Inner Box -- /-	Units/Inner Box /-	Inner Boxes/Outer Box - /!ç	Units/Outer Box /!ç	Reel	Inner Box	Outer Boxç
SOT-23	3,000	10	30,000	6	180,000	7 T x8	180x120x180	390x385x205

„Đ y f / Notices