DTA143ZKA

Rev.H Jul.-2025

DATA SHEET

/ Descriptions

VRW056 Ṃ Ṃ Ŀ SQS ̈Ǫ Ȅ s ǁ ˥ Silicon PNP Digital transistor in a SOT-23 Plastic Package.

/ Features

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With built-in bias resistors, simplify circuit design, reduce a quantity of parts and manufacturing process,HF Product.

/ Applications

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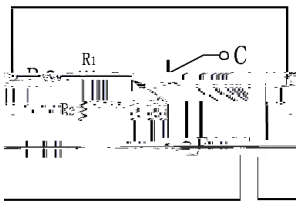
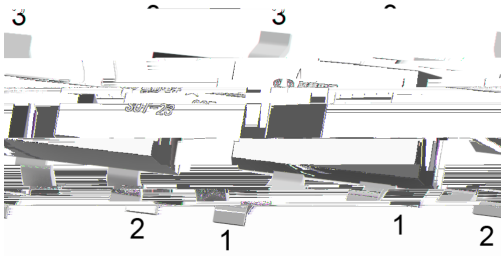
Switching, inverter circuit, interface circuit and driver circuit applications.

/ Equivalent Circuit



/ Pinning



PIN 1 χ Base PIN 2 χ Emitter PIN 3 χ Collector

/ h_{FE} Classifications & Marking

Marking	HE13

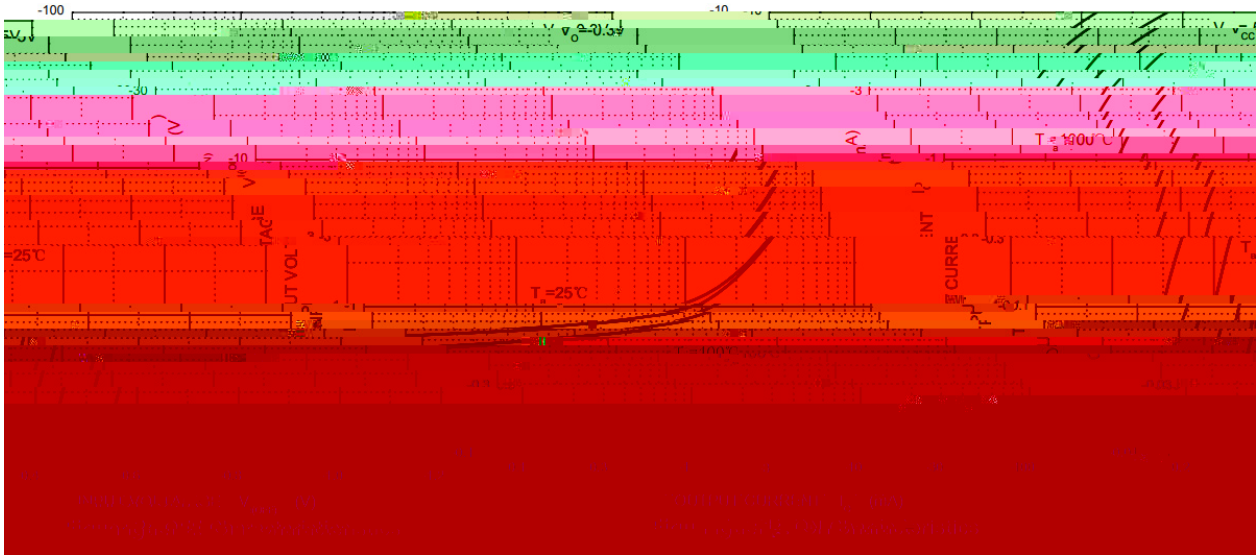
/ Absolute Maximum Ratings(Ta=25)

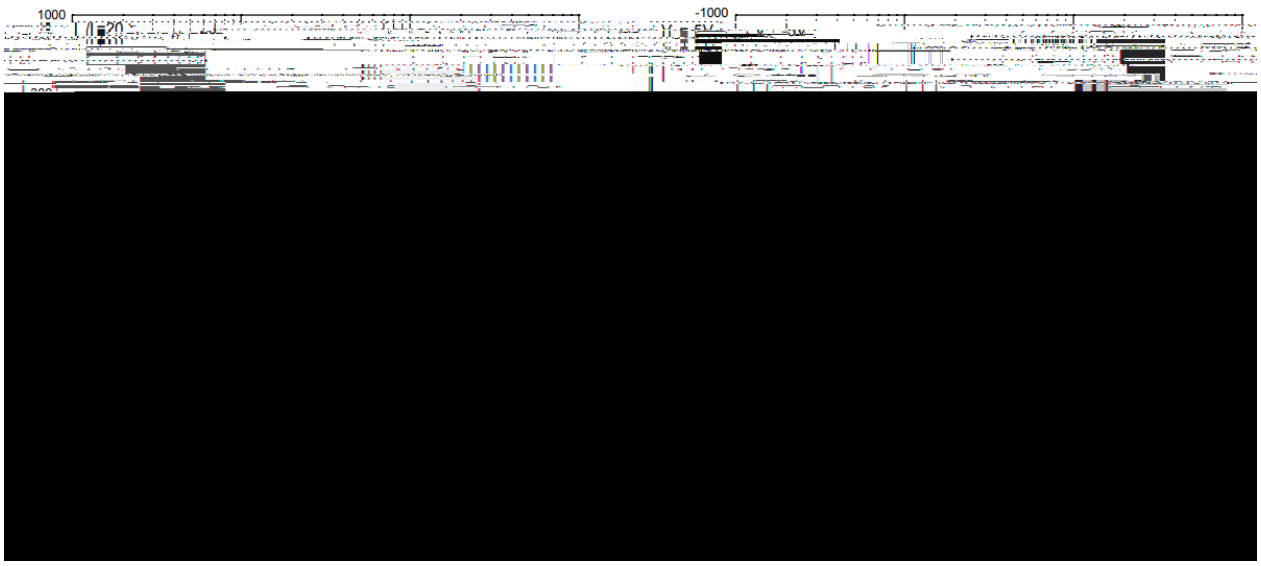
v ̈Ω̣ Parameter	ɬ N Symbol	̈Ω̣Ö Rating	D Ɉ Unit
Output Voltage	V_{CC}	-50	V
Input Voltage	V_{IN}	-30	V
		5.0	V
Output Current	I_O	-100	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

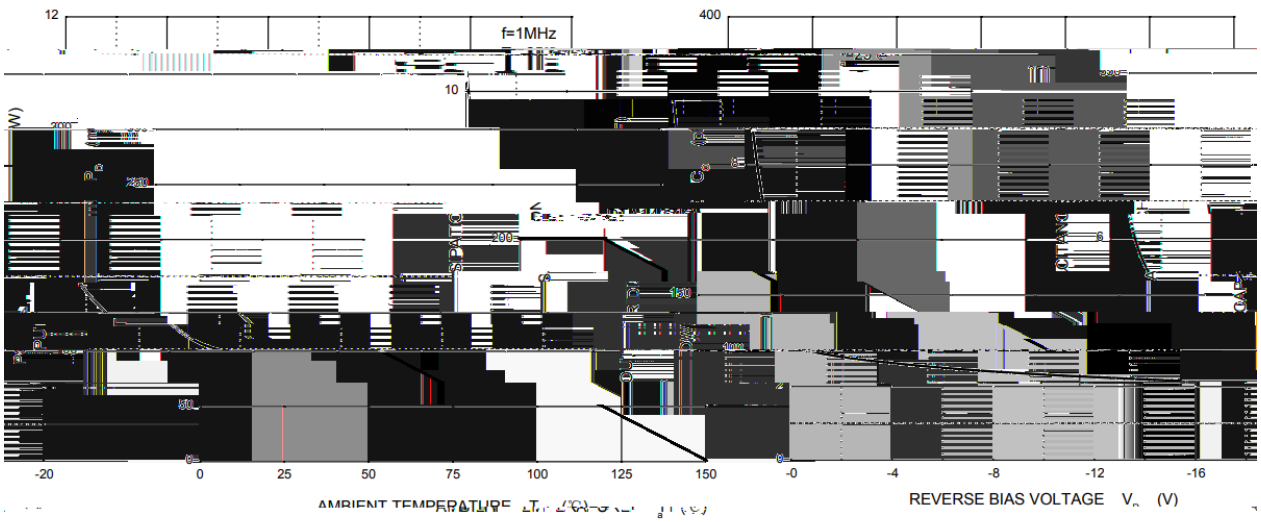
/ Electrical Characteristics(Ta=25)

v ̈Ω̣ Parameter	ɬ N Symbol	⊥ ;ɬ Ţ Test Conditions	ω̣ ṇ Ö Min	Ɛ ʒ Ö Typ	ω̣ ʑ Ö Max	D Ɉ Unit
Input Voltage	$V_{I(off)}$	V_{CC}=-5.0V I_O=-100μA	-0.5			V
	$V_{I(on)}$	V_O=-0.3V I_O=-5.0mA			-1.3	V
Output Voltage	$V_{O(on)}$	I_O=-5.0mA I_I=-0.25mA		-0.1	-0.3	V
Input Current	I_I	V_I=-5.0V			-1.8	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	80			
Transition Frequency	f_T	V_{CE}=-10V I_E=5.0mA f=100MHz		250		MHz
Resistance1	R_1		3.29	4.7	6.11	KΩ
Resistance Ratio	R_2/R_1		8.0	10	12	

/ Electrical Characteristic Curve







P_D — T_a C_O — V_R

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

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1 Ĺ ♬ □ ỷ 150 Ḱ 180 ɬ ı `H ژ 60 Ḱ 90sec;

Note:

1.Preheating:150~180 ɬ , Time:60~90sec.7( )-5[7180-