VRW056 ṂṂ Ḅ QSQ ÆṀ ч s Ⅱㄱ Silicon NPN transistor in a SOT-23 Plastic Package.

ت ⊐ я ∪ Ӈ ı Ɔ Ш ƶ ı ㄏ ᵀ DHF0T434 ‰ ´ ᴝ ᶦ ، ό ɭ ∂ ı ṇ ғ β
Low $V_{CE(sat)}$, high current, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

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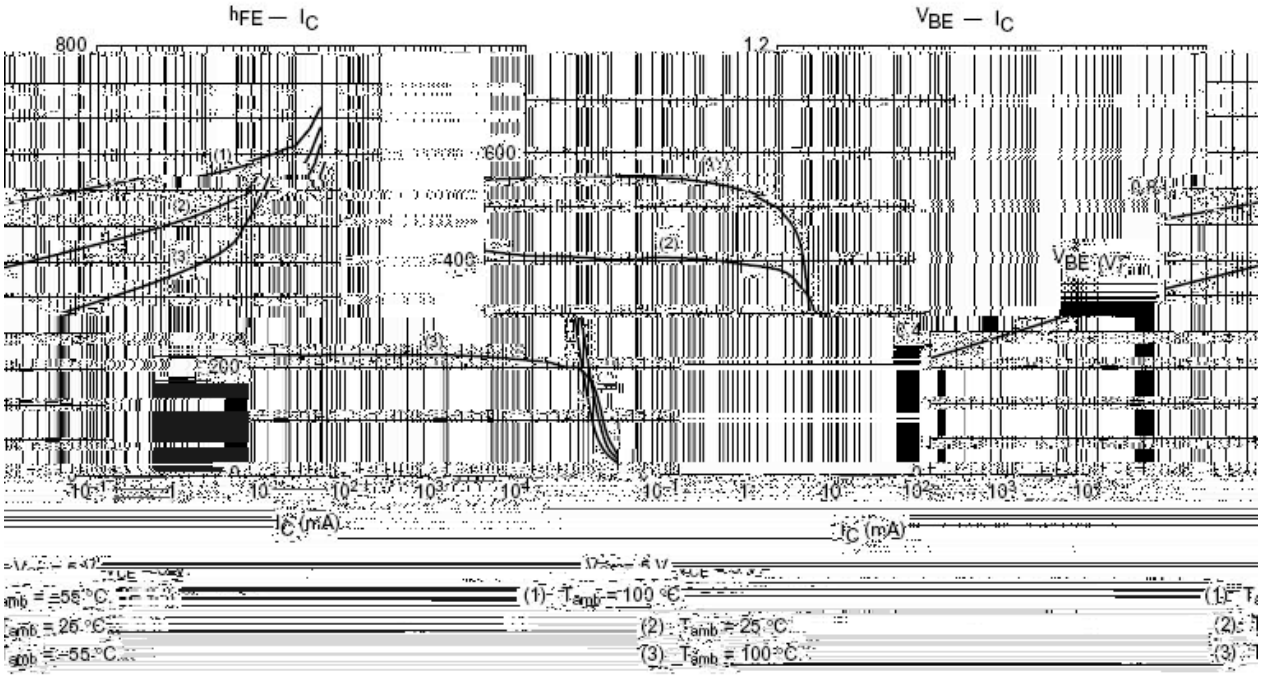
ā / Absolute Maximum Ratings(Ta=25；)

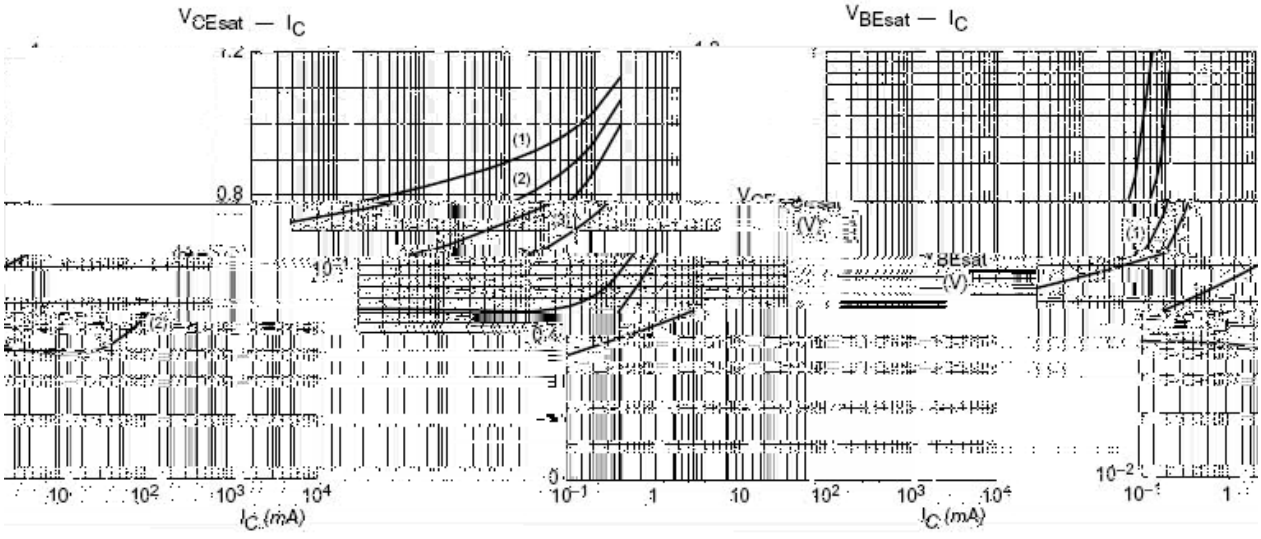
v ̈Ω Parameter	ϒ N Symbol	̈Ω Ö Rating	D Ч Unit
Collector to Base Voltage	V_{CBO}	80	V
Collector to Emitter Voltage	V_{CEO}	60	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1	A
Peak Collector Current	I_{CM}	2	A
Base Current	I_B	0.3	A
Peak Base Current	I_{BM}	1	A
Collector Power Dissipation	P_C	400	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

) 50

v ̈Ω Parameter	ϒ N Symbol	Ш :ϯ ϯ Test Conditions	ώ ṇ Ö Min	Ɛ ʒ Ö Typ	ώ ᶻ Ö Max	D Ч Unit
Collector Cut-Off Current	I_{CBO}	V_{CB}=60V I_E=0A			100	nA
		V_{CB}=60V I_E=0A T_j=150			50	A
Collector Cut-Off Current	I_{CES}	V_{CE}=60V V_{BE}=0V			100	nA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=5.0V I_C=0A			100	nA
DC Current Gain	$h_{FE(1)}$	V_{CE}=5.0V I_C=500mA	200	350		
	$h_{FE(2)}$	V_{CE}=5.0V I_C=1.0mA	250	400		
	$h_{FE(3)}$	V_{CE}=5.0V I_C=1.0A	100	150		
Collector-Emitter Saturation Voltage	$V_{CE(sat)(1)}$	I_C=100mA I_B=1.0mA		90	110	mV
	$V_{CE(sat)(2)}$	I_C=500mA I_B=50mA		110	140	mV
	$V_{CE(sat)(3)}$	I_C=1.0A I_B=100mA		200	250	mV
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=1.0A I_B=50mA		0.95	1.1	V
Base-Emitter Voltage	V_{BE}	V_{CE}=5.0V I_C=1.0A		0.82	0.9	V
Transition Frequency	f_T	V_{CE}=10V I_C=50mA f=100MHz	150	220		MHz
Output Capacitance	C_C	V_{CB}=10V I_E=0 f=1.0MHz		5.5	10	pF

/ Electrical Characteristic Curve

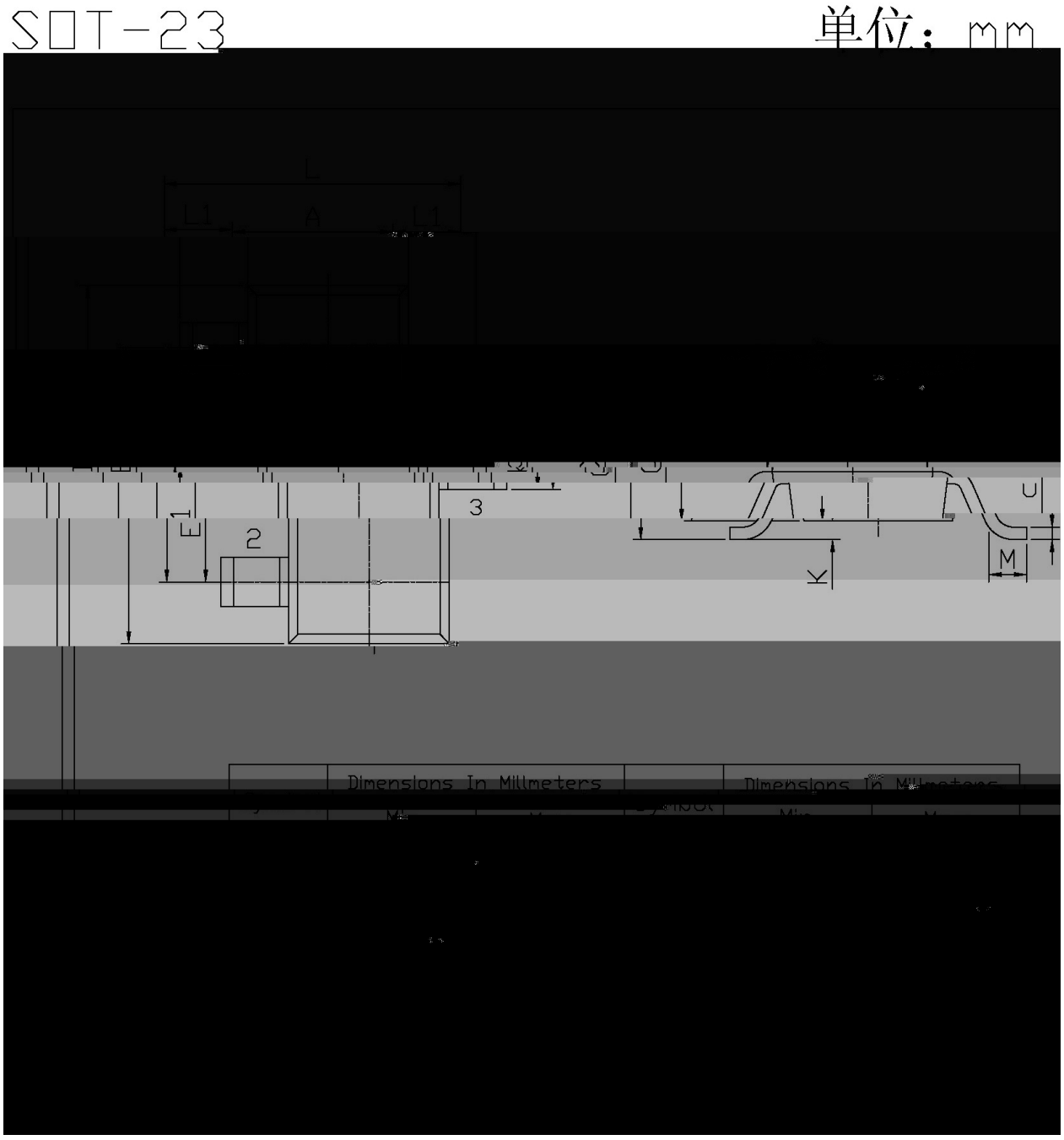




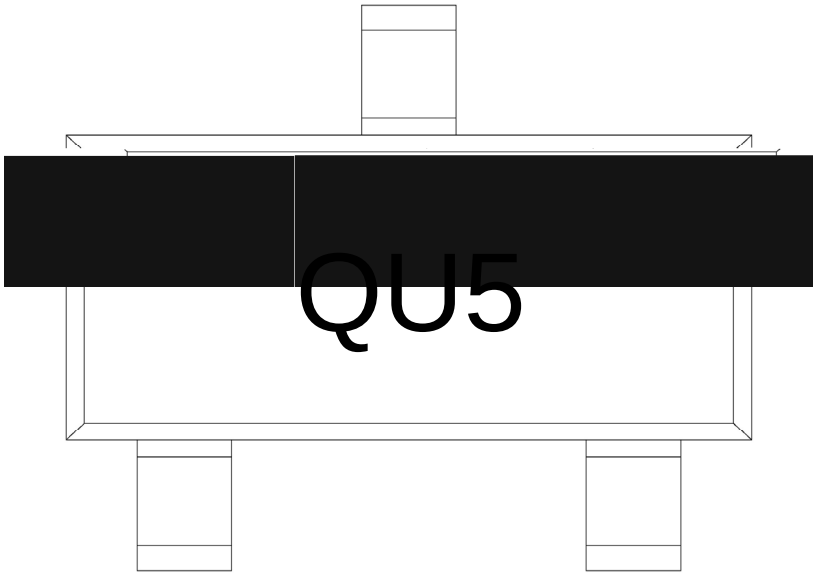
IC/IB = 20.
(1) Tamb = −55 °C.
(2) Tamb = 25 °C.
(3) Tamb = 100 °C.

Tamb = 25 °C.
(1) IC/IB = 100.
(2) IC/IB = 50.

/ Package Dimensions



¥ / Marking Instructions



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U5 χ ₦ ვ ᴺ Γ Ъ

Note:

Q: Automobile halogen-free product Code

U5 χ Product Type Code