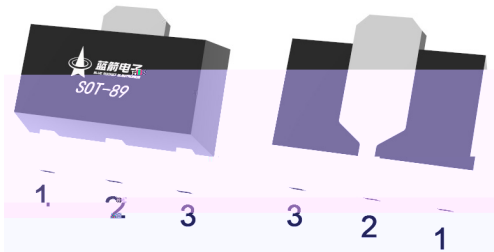


High current, low voltage, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

Driver stages of audio and video amplifiers applications, Meet the stringent requirements of automotive applications.



PIN1 χ Base PIN 2 χ Collector PIN 3 χ Emitter

$h_{FE(1)}$ Classifications	10	16
$h_{FE(1)}$ Range	63 160	100 250

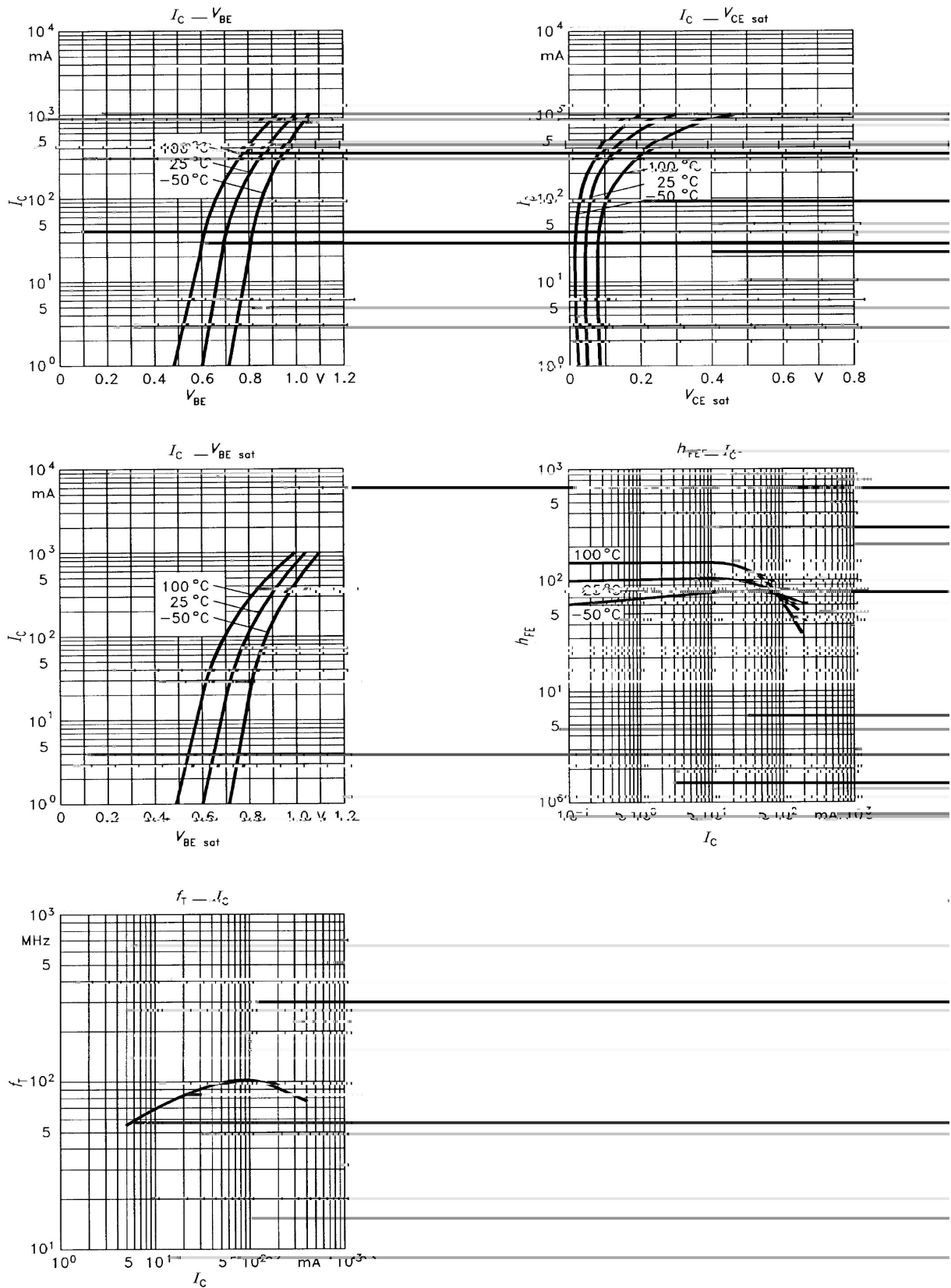
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	100	V
Collector to Emitter Voltage	V_{CEO}	80	V
Emitter to Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	1	A
Peak Collector Current	I_{CM}	1.5	A
Peak Base Current	I_{BM}	0.2	A
Collector Power Dissipation	$P_C(T_C=25)$	1.3	W
Storage Temperature Range	T_{stg}	-55 ~ 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	$I_C=100\mu A$ $I_E=0$	100			V
Collector to Emitter Breakdown Voltage	V_{CEO}	$I_C=500\mu A$ $I_B=0$	80			V
Emitter to Base Breakdown Voltage	V_{EBO}	$I_E=100\mu A$ $I_C=0$	5.0			V
Collector Cut-Off Current	$I_{CBO(1)}$	$V_{CB}=30V$ $I_E=0$			0.1	μA
	$I_{CBO(2)}$	$V_{CB}=30V$ $I_E=0$ $T_j=125$			10	μA
Emitter Base Cut-Off Current	I_{EBO}	$V_{EB}=5V$ $I_C=0$			0.1	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=2V$ $I_C=150mA$	63		250	
	$h_{FE(2)}$	$V_{CE}=2V$ $I_C=5mA$	40			
	$h_{FE(3)}$	$V_{CE}=2V$ $I_C=500mA$	25			
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500mA$ $I_B=50mA$			0.5	V
Base to Emitter Voltage	V_{BE}	$I_C=500mA$ $V_{CE}=2V$			1	V
Transition Frequency	f_T	$I_C=10mA$ $V_{CE}=5V$ $f=100MHz$		130		MHz
DC Current Gain Ratio Of The Complementary Pairs	$\frac{h_{FE1}}{h_{FE2}}$	$ I_C =150mA$ $ V_{CE} =2V$		1.3	1.6	

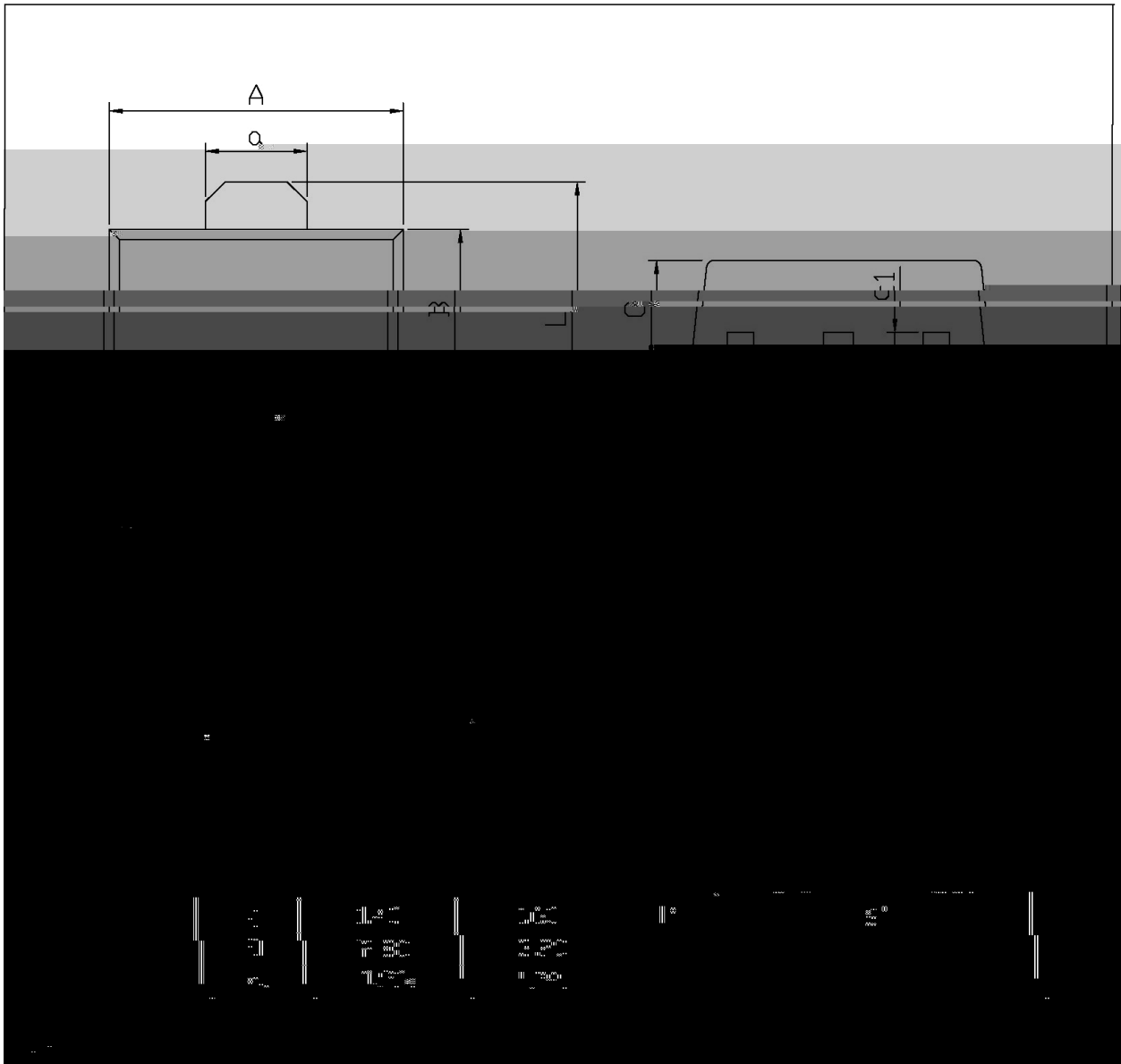
/ Electrical Characteristic Curve



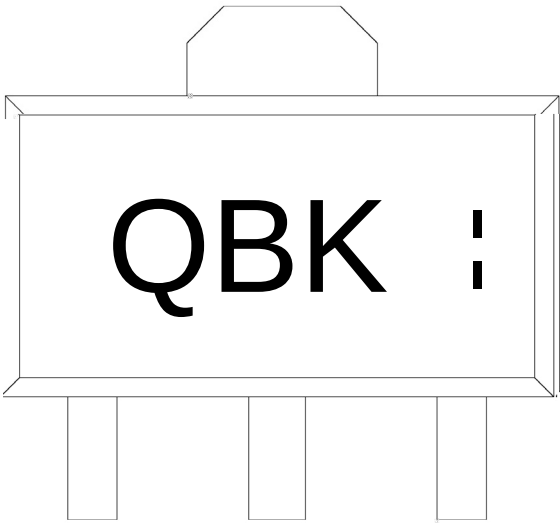
/ Package Dimensions

SOT-89

单位: mm



/ Marking Instructions



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Note:

Q: Automobile halogen-free product Code

BK: Product Type

**: Lot No. Code, code change with Lot No

BRBCX56Q
Rev.A Mar.-2023