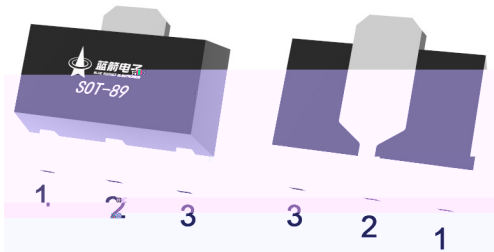


High current, low voltage, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

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

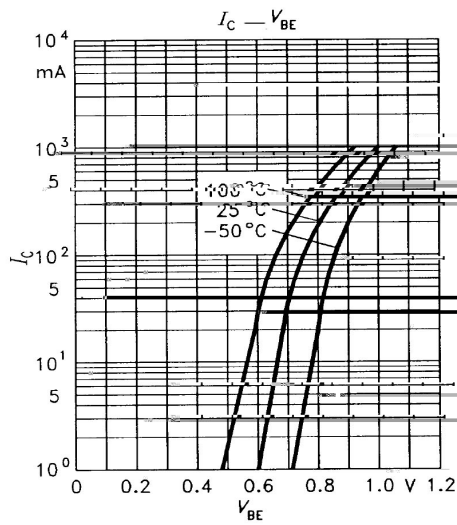
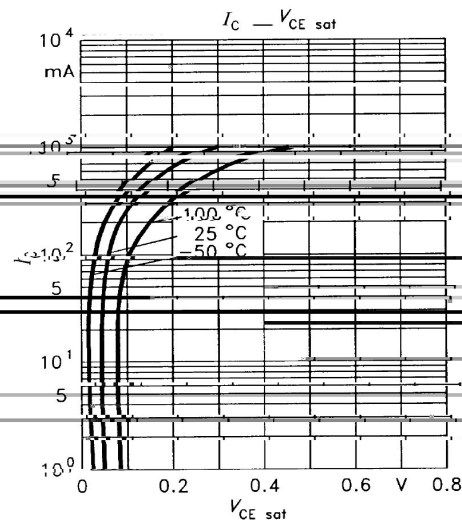
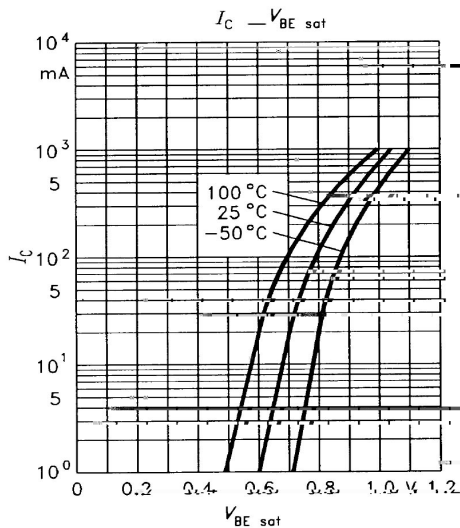
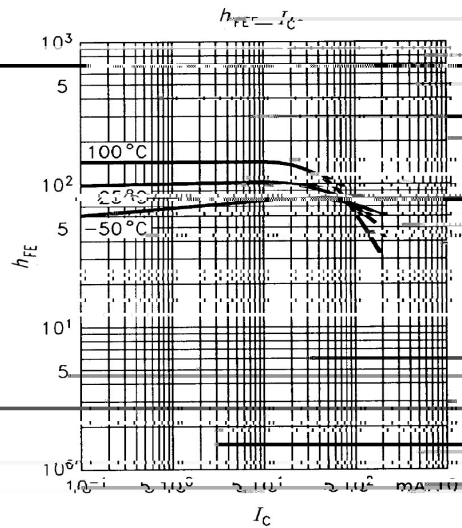
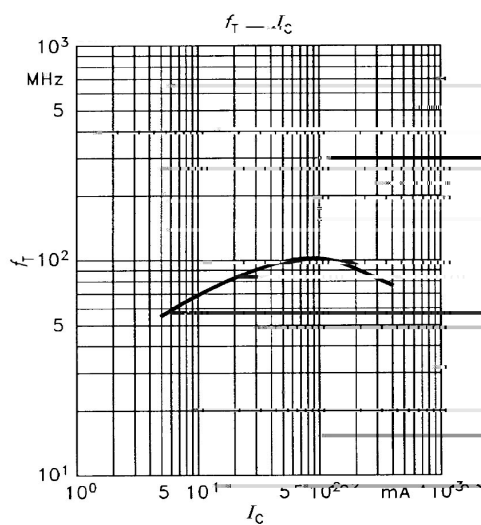
/ Absolute Maximum Ratings(Ta=25)

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 μ A I _E =0	100			V
Collector to Emitter Breakdown Voltage	V _{CEO}	I _C =500 μ A I _B =0	80			V
Emitter to Base Breakdown Voltage	V _{EBO}	I _E =100 μ A I _C =0	5.0			V
Collector Cut-Off Current	I _{CBO(1)}	V _{CB} =30V I _E =0			0.1	μ A
	I _{CBO(2)}	V _{CB} =30V I _E =0 T _j =125			10	μ A
Emitter Base Cut-Off Current	I _{EBO}	V _{EB} =5V I _C =0			0.1	μ A
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	

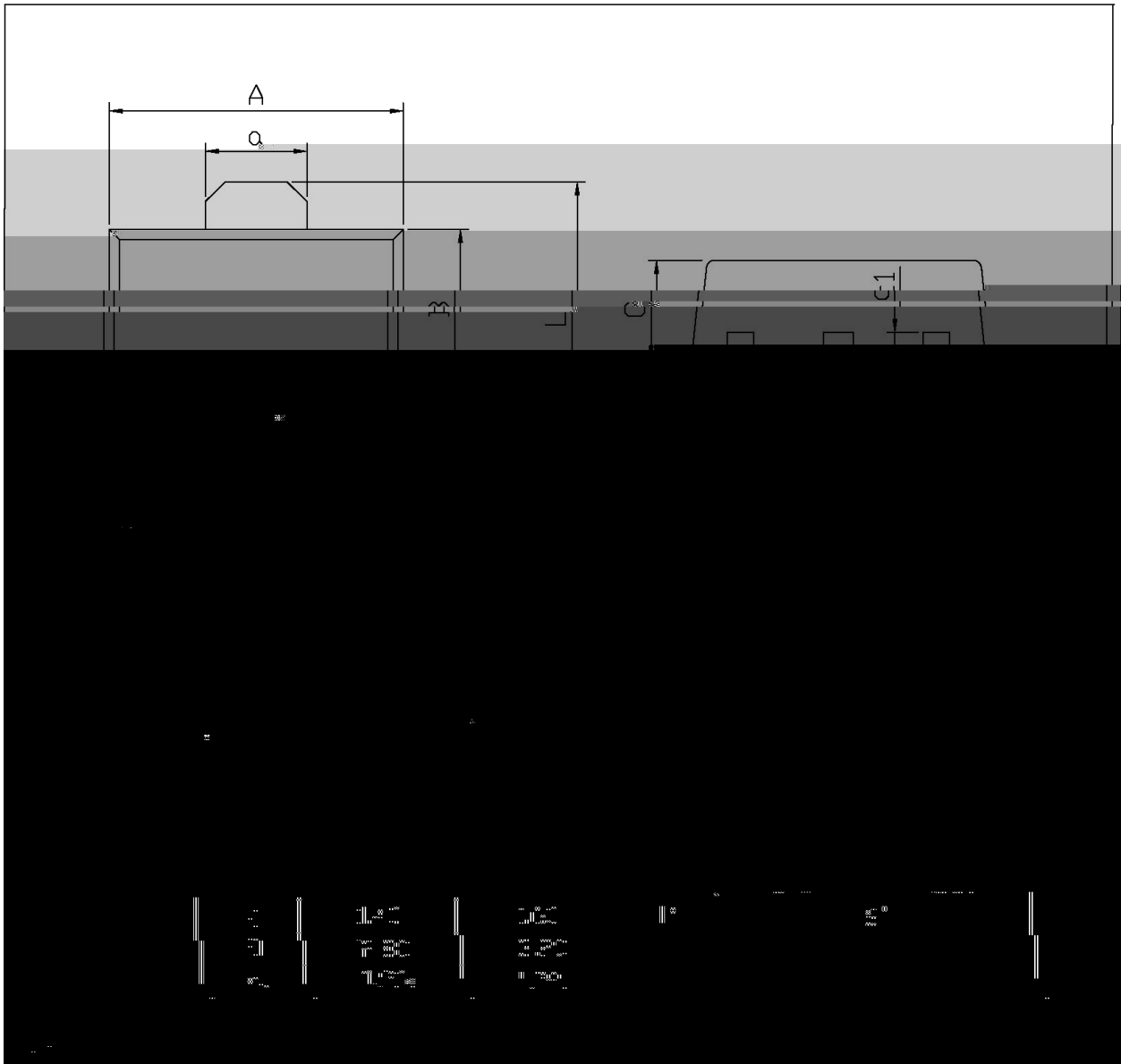
/ Electrical Characteristic Curve



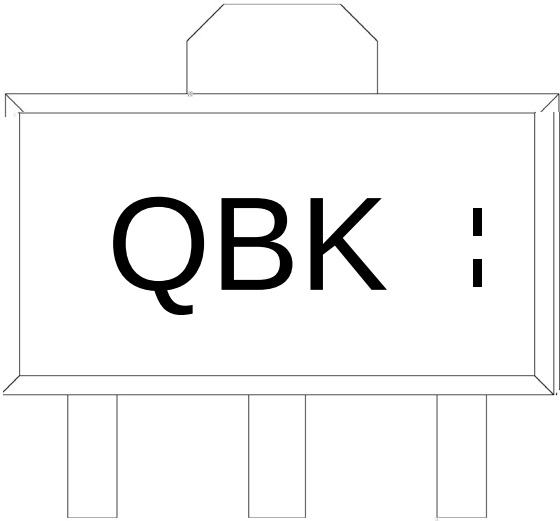
/ Package Dimensions

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