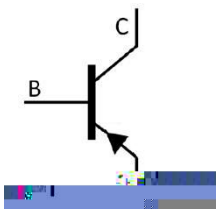
SOT-89 PNP Silicon PNP transistor in a SOT-89 Plastic Package.

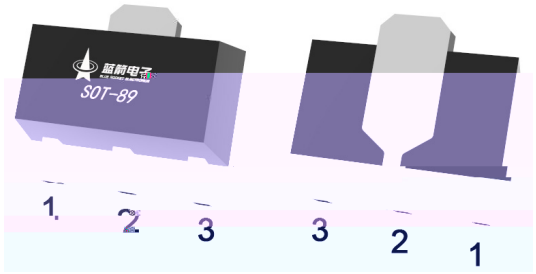
AEC-Q101

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

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

/ Equivalent Circuit





PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

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

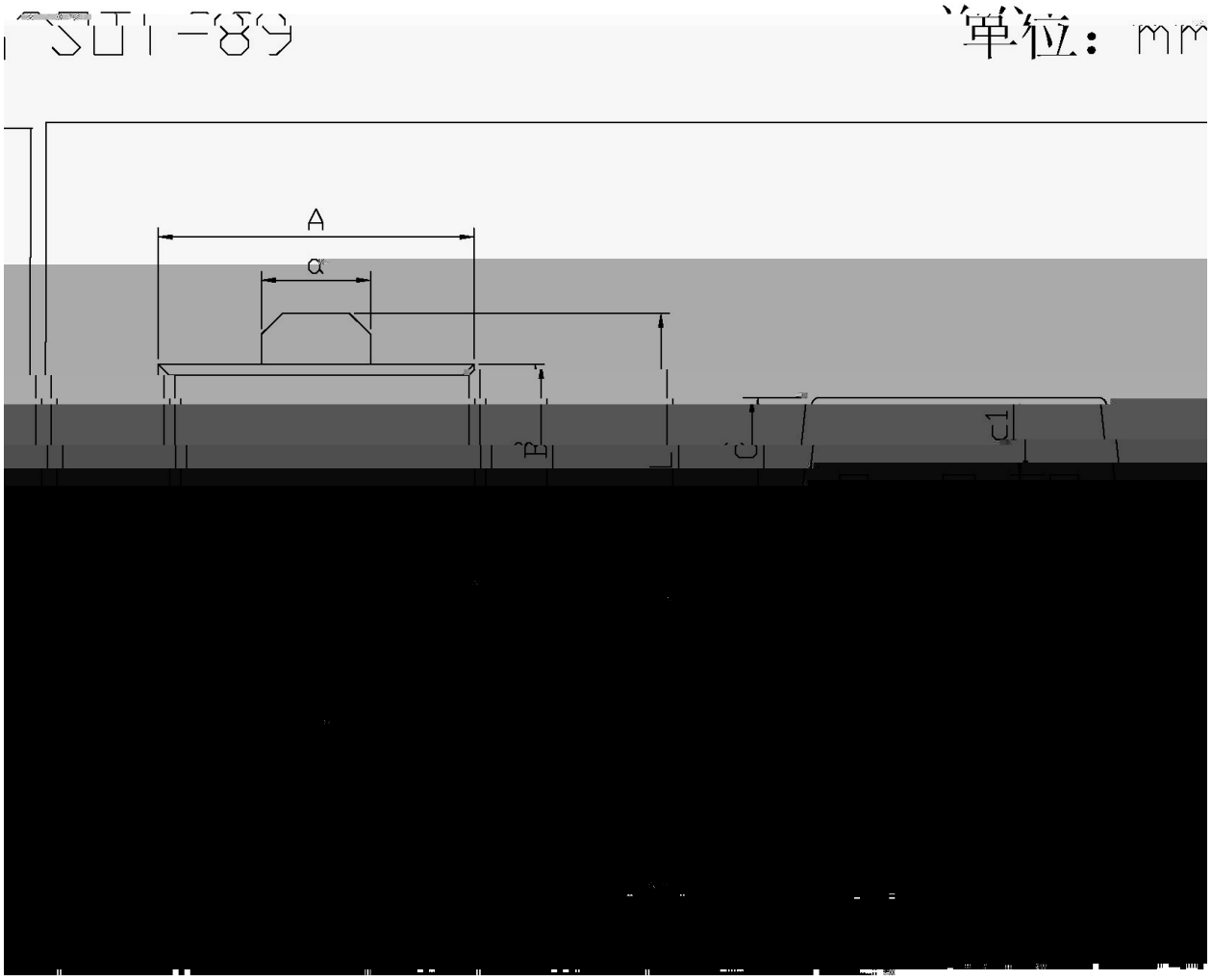
/ Absolute Maximum Ratings(Ta=25)

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	

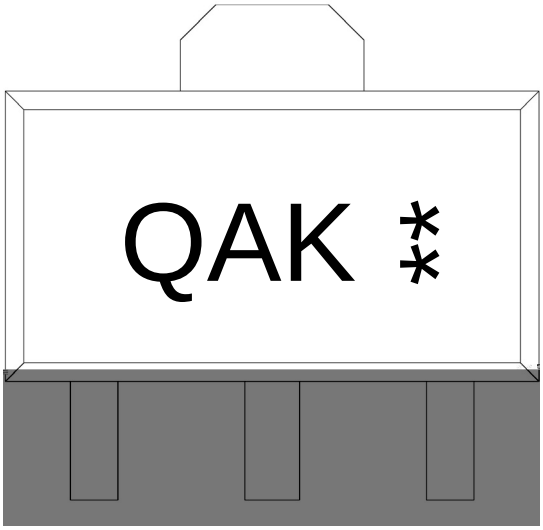
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector 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}=-5.0V f=100MHz		50		MHz

/ Package Dimensions



/ Marking Instructions



Q

AK

**

Note:

Q:	Automobile halogen-free product Code
AK:	Product Type Code
**:	Lot No. Code, code change with Lot No