/ Descriptions

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

/ Features

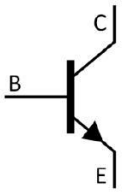
, , BR2SB1424Q AEC-Q101

Low $V_{CE(sat)}$,excellent current gain characteristic, Complementary to BR2SB1424Q, Qualified to AEC-Q101 Standards for High Reliability, HF Product.

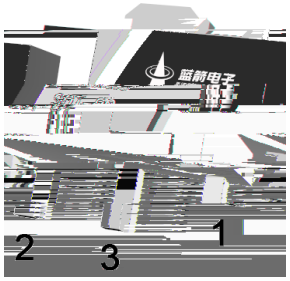
/ Applications

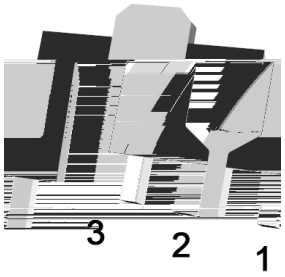
General purpose amplifier, Meet the stringent requirements of automotive applications.

/ Equivalent Circuit



/ Pinning





PIN1 Base PIN 2 Collector PIN 3 Emitter

/ h_{FE} Classifications & Marking

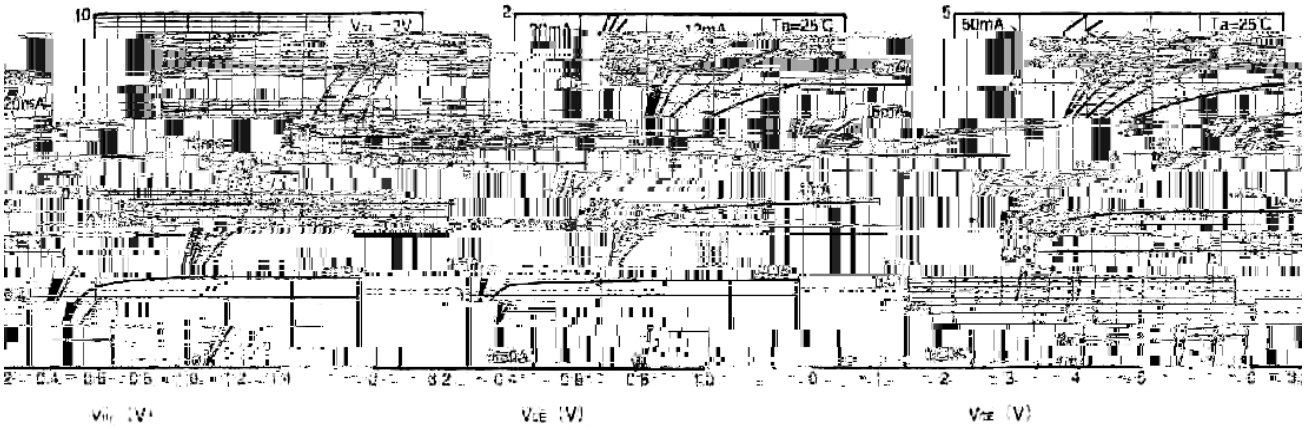
h_{FE} Classifications Symbol	Q	R	S	E
h_{FE} Range	120 270	180 390	270 560	390 820
Marking	QCFQ	QCFR	QCFS	QCFE

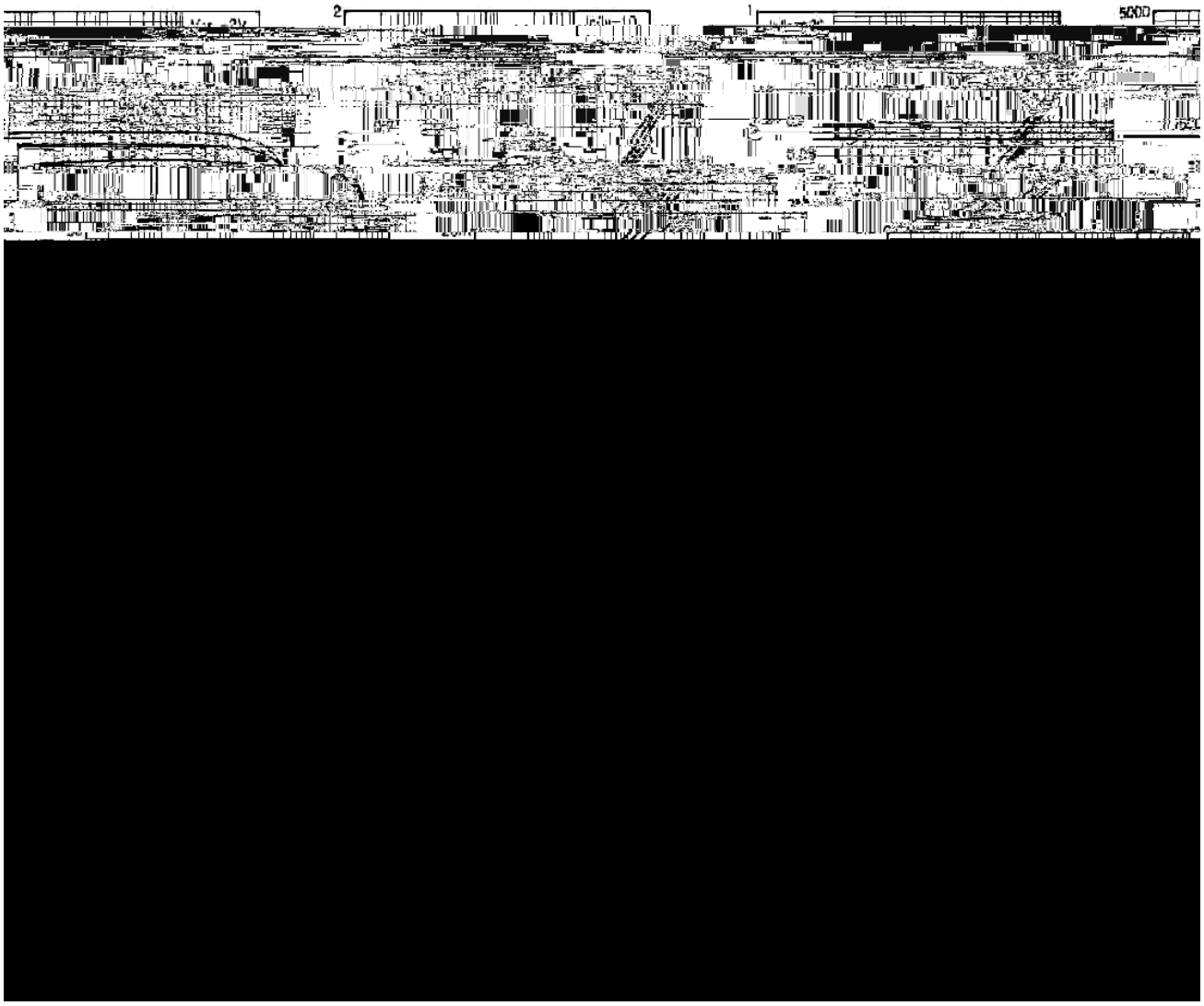
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	40	V
Collector to Emitter Voltage	V_{CEO}	20	V
Emitter to Base Voltage	V_{EBO}	6.0	V
Collector Current-Continuous	$I_{C(DC)}$	3.0	A
Collector Base-Continuous(Pulse)*	$I_{C(Pulse)*}$	5.0	A
Collector Power Dissipation	P_C	500	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

*:Single pulse P_W=10ms

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector to Base Breakdown Voltage	V_{CBO}	I_C=50μA	40			V
Collector to Emitter Breakdown Voltage	V_{CEO}	I_C=1.0mA	20			V
Emitter to Base Breakdown Voltage	V_{EBO}	I				

/ Electrical Characteristic Curve

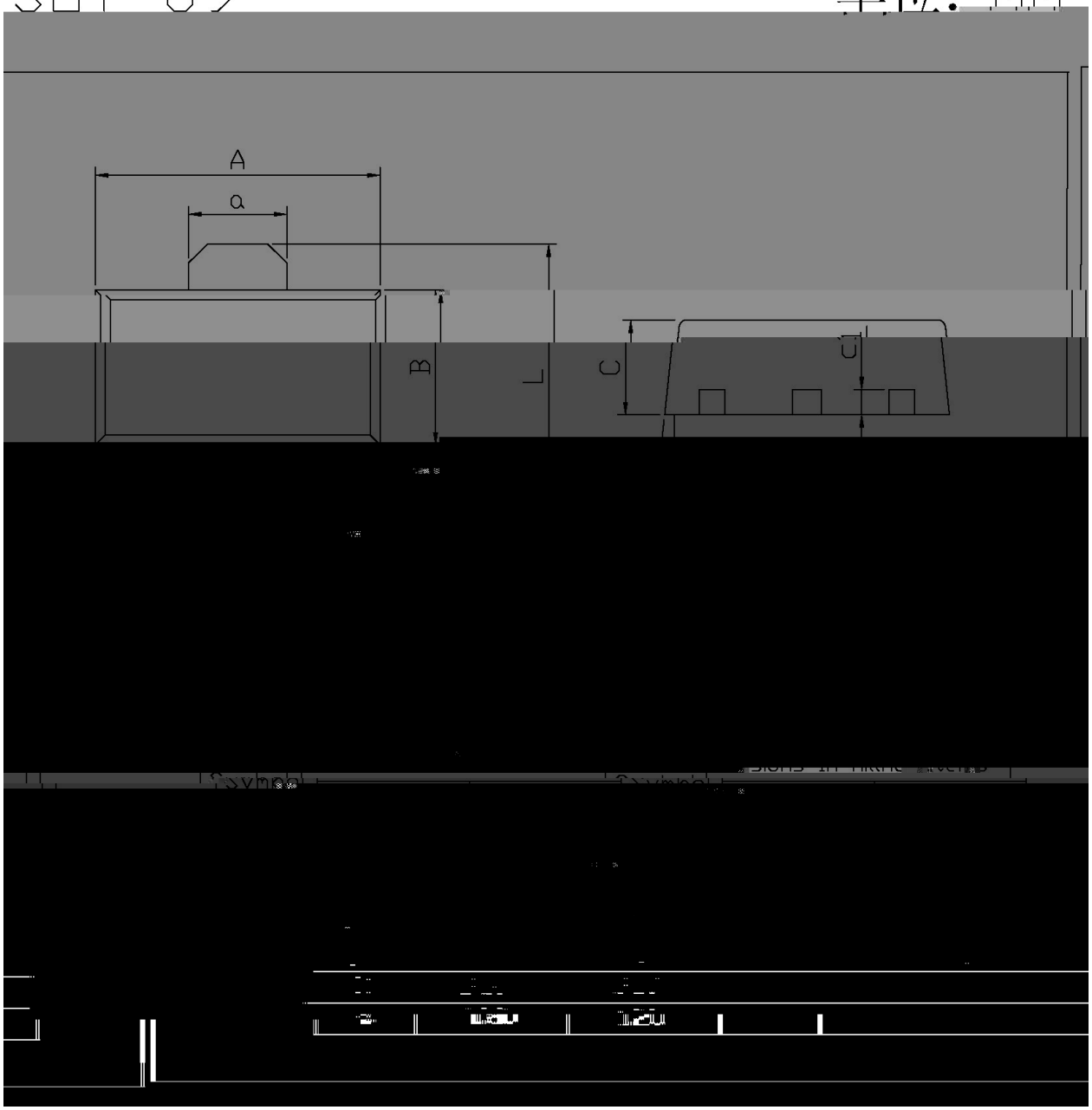




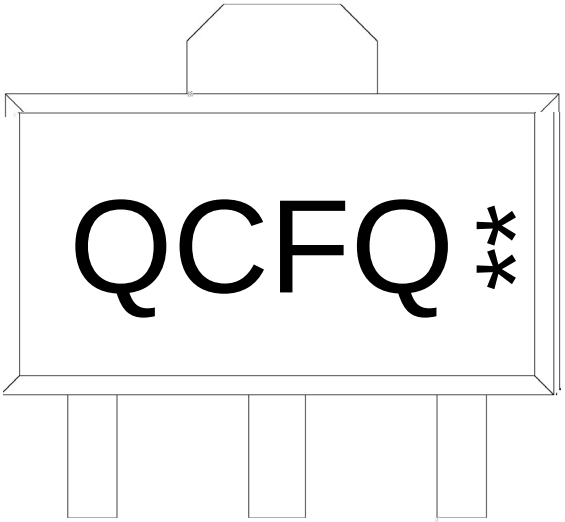
/ Package Dimensions

SOT-89

单位：mm



/ Marking Instructions



Q

CF

Q: h_{FE}

**

Note:

Q: Automobile halogen-free product Code

CF: Product Type

Q h_{FE} Classifications Symbol

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