

FEATURES

- · Epoxy meets UL-94 V-0 flammability rating
- · Power Dissipation of 500mW
- · High Stability and High Reliability

SOT-89

1. BASE 2. COLLECTOR 2

3. EMITTER

MECHANICAL DATA

- · Case:SOT-89
- · Terminals:Plated solderable per MIL-STD-750,method 2026
- . Mounting Position: Any

Marking:Y2

MAXIMUM RATINGS(Ta=25°C Unless otherwise specified)

ltem	Symbol	Unit	Value
Collector-Emitter Voltage	V CEO	V	-25
Collector-Base Voltage	Vсво	V	-40
Emitter-Base Voltage	V _{EBO}	V	-5.0
Collector Current, Continuous	Ic	mA	-1500
Power Dissipation	P _D	mW	500
Operation Junction Temperature	TJ	°C	-55 to +150
Storage Temperature	T _{STG}	°C	-55 to +150
Thermal resistance From junction to ambient	Røja	°C/W	250

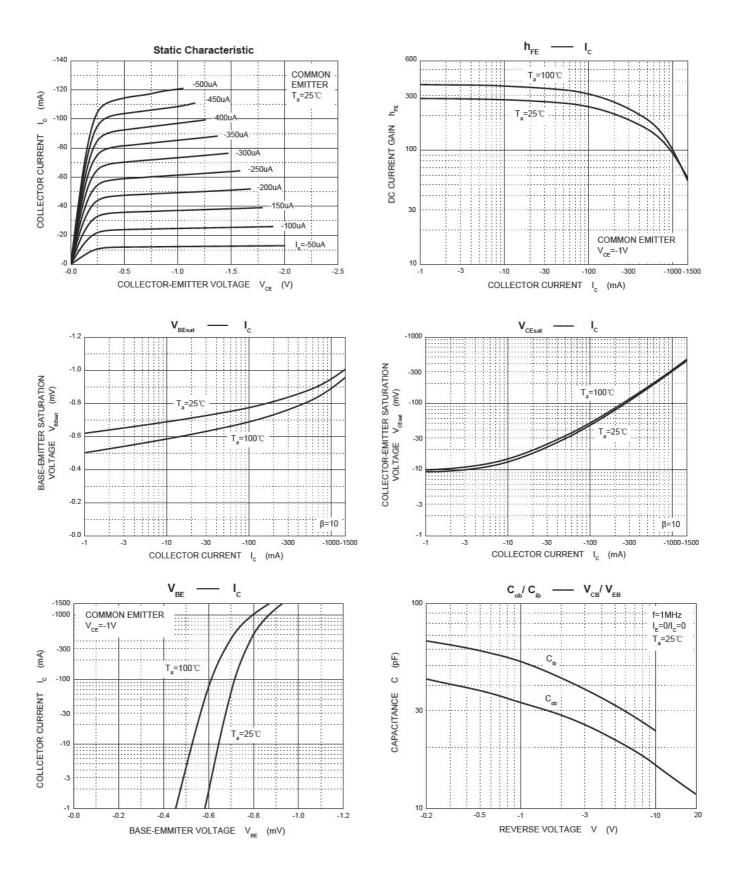
ELECTRICAL CHARACTERISTICS(T_A=25°C Unless otherwise specified)

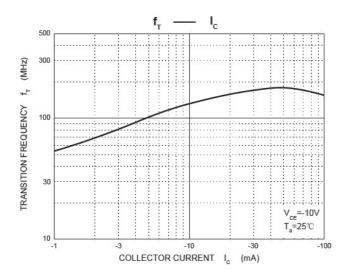
Item	Symbol	Unit	Conditions	Min	Max
Collector-Emitter Breakdown Voltage	V (BR)CEO	Vdc	Ic=-0.1mAdc,IB=0	-25	
Collector-Base Breakdown Voltage	V (BR)CBO	Vdc Ic=-100μAdc,IE=0		-40	
Emitter-Base Breakdown Voltage	V _{(BR)EBO}	Vdc	IE=-100µAdc,Ic=0	-5.0	
Collector cut-off Current	СВО	nAdc	V _{CB} =-40Vdc, le=0		-100
Collector cut-off Current	I _{CEO}	nAdc	Vce=-20Vdc,Ib=0		-100
Emitter cut-off Current	I _{EBO}	nAdc	V _{EB} =-5Vdc,Ic=0		-100
	hre		Ic=5mAdc,VcE=2.0Vdc	_	
DC Current Gain			Ic=-100mAdc,VcE=-1Vdc	85	400
			Ic=-800mAdc,VcE=-1Vdc	40	
Callesten Forther Catamatica Walterna	VOE (t)	Vdc	Ic=10mAdc,IB=1.0mAdc		
Collector-Emitter Saturation Voltage	VCE(set)	vac	Ic=-800mAdc,IB=-80mAdc		-0.5
B 5 10 6 1 11 14 11		Vdc	Ic=-800mAdc,IB=-80mAdc		-1.20
Base-Emitter Saturation Voltage	VBE	vac	VcE=-1Vdc,Ic=-10mAdc		-1.0
Output Capacitance	Cobo	pF	VcB=-10Vdc,f=1.0MHZ,IE=0		20
Input Capacitance	Cibo	pF	V _{EB} =0.5Vdc,f=1.0MHZ,Ic=0		
Current Gain-Bandwidth Product	f⊤	MHZ	Ic=-50mAdc,VcE=-10Vdc f=30MHZ	100	
Noise Figure	NF	dB	Vc==5.0V,f=1.0kHZ, Ic=100μA, Rs=1. 0K		

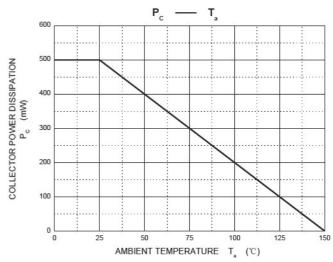
CLASSIFICATION OF h FE(1)

Rank	В	С	D	D3
Range	85–160	120-200	160-300	300-400

Characteristics(Typical)

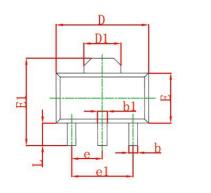


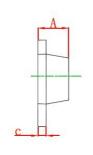




Outline Dimensions

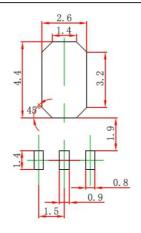
SOT-89





Symbol	Dimensions	In Millimeters	Dimensions In Inches		
	Min	Max	Min	Max	
Α	1.400	1.600	0.055	0.063	
b	0.320	0.520	0.013	0.020	
b1	0.400	0.580	0.016	0.023	
С	0.350	0.440	0.014	0.017	
D	4.400	4.600	0.173	0.181	
D1	1.550 REF.		0.061 REF.		
E	2.300	2.600	0.091	0.102	
E1	3.940	4.250	0.155	0.167	
е	1.500 TYP.		0.060 TYP.		
e1	3.000 TYP.		0.118 TYP.		
L	0.900	1.200	0.035	0.047	

Suggested pad layout



Dimensions in millimetrers

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