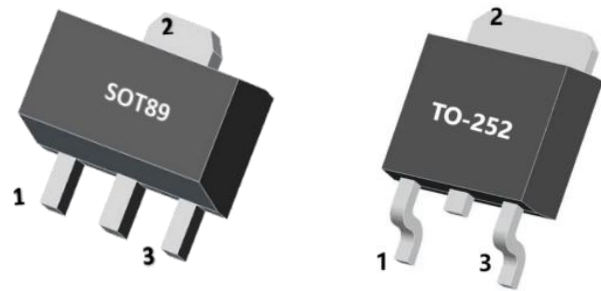


FEATURES

- *High current output up to 3A
- *Low saturation voltage
- *Complement to 2SB772

APPLICATIONS

- *Audio power amplifier
- *DC-DC converter
- *Voltage regulator



1. BASE
2. COLLECTOR
3. EMITTER

MARKING



D882=Device Code

ABSOLUTE MAXIMUM RATINGS (TA=25°C, unless otherwise specified)

SYMBOL	PARAMETER		VALUE	UNIT
VCBO	Collector-Base Voltage		40	V
VCEO	Collector-Emitter Voltage		30	V
VEBO	Emitter-Base Voltage		7	V
IC	Collector Current (DC)		3	A
ICP	Collector Current (Pulse)		7	A
IB	Base Current		0.6	A
PC	Collector Dissipation	TO-252	1	W
		SOT-89	0.5	
Tj	Operating Junction Temperature		+150	°C
Tstg	Storage Temperature		-55 to +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged.

2. Absolutemaximum ratings are stress ratings only and functional device operation is not implied.

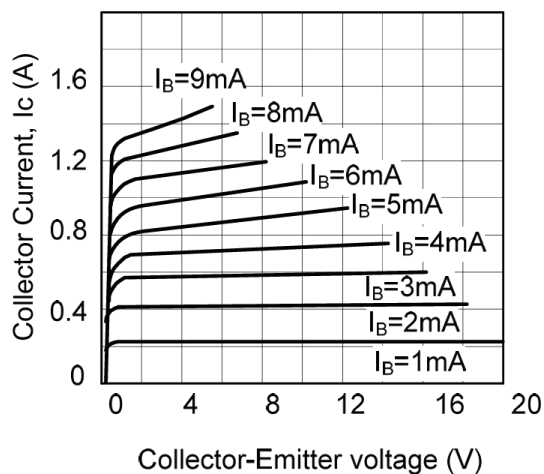
ELECTRICAL CHARACTERISTICS (TA=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	V _{CBO}	I _C =100μA, I _E =0	40			V
Collector-Emitter Breakdown Voltage	V _{CEO}	I _C =1mA, I _B =0	30			V
Emitter-Base Breakdown Voltage	V _{EBO}	I _E =100μA, I _C =0	7			V
Collector Cut-Off Current	I _{CBO}	V _{CB} =30V, I _E =0			1	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =3V, I _C =0			1	μA
DC Current Gain (Note) (CLASSIFICATION OF h _{FE2})	h _{FE1}	V _{CE} =2V, I _C =20mA	30	200		
	h _{FE2}	V _{CE} =2V, I _C =1A	100		200	
			160		320	
			200		400	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =2A, I _B =0.2A		0.3	0.5	V
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =2A, I _B =0.2A		1.0	2.0	V
Current Gain Bandwidth Product	f _T	V _{CE} =5V, I _C =0.1A		80		MHz
Output Capacitance	C _{OB}	V _{CB} =10V, I _E =0, f=1MHz		45		pF

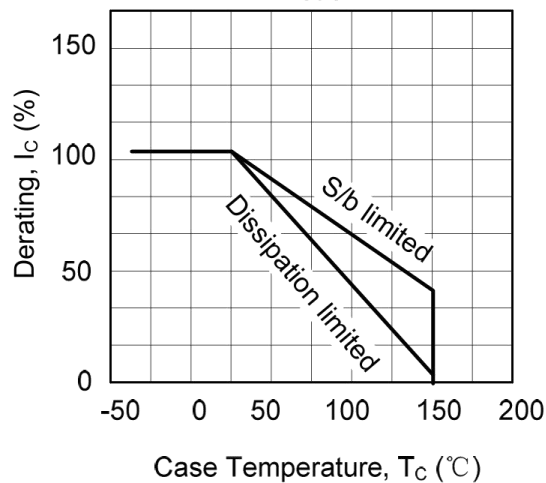
Note: Pulse test: P_w ≤ 300μs, Duty Cycle ≤ 2%

TYPICAL CHARACTERISTICS

Static Characteristics

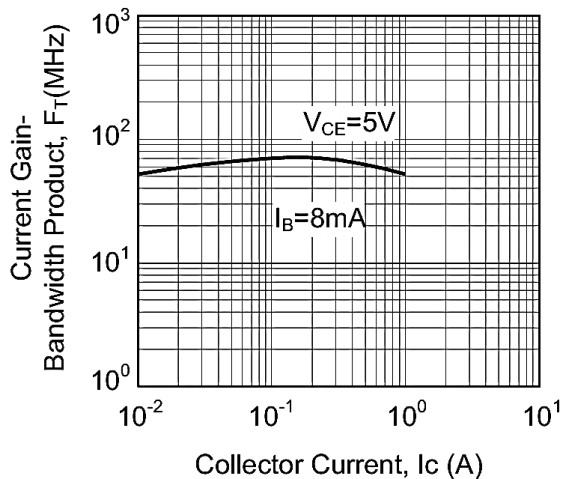


Derating Curve of Safe Operating Areas

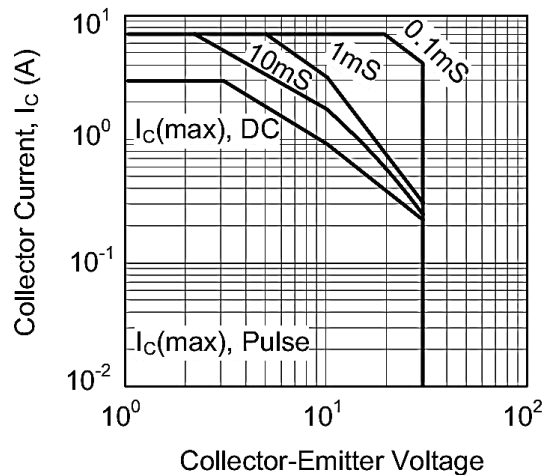


TYPICAL CHARACTERISTICS(Con.t)

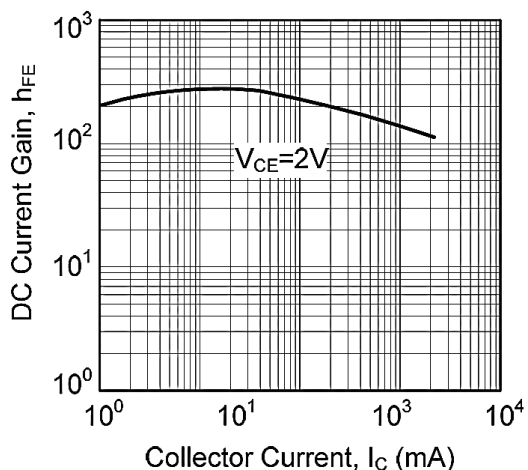
Current Gain-Bandwidth Product



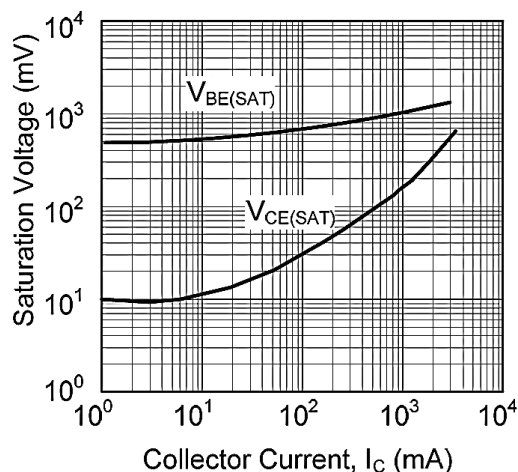
Safe Operating Area



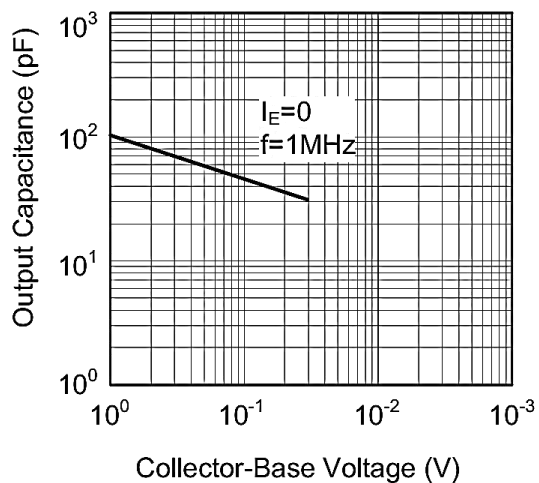
DC Current Gain



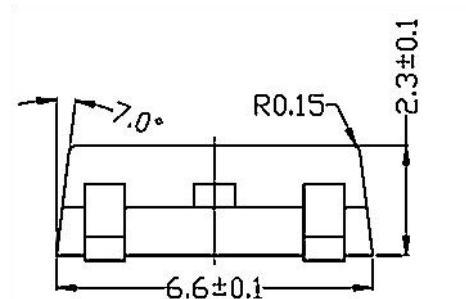
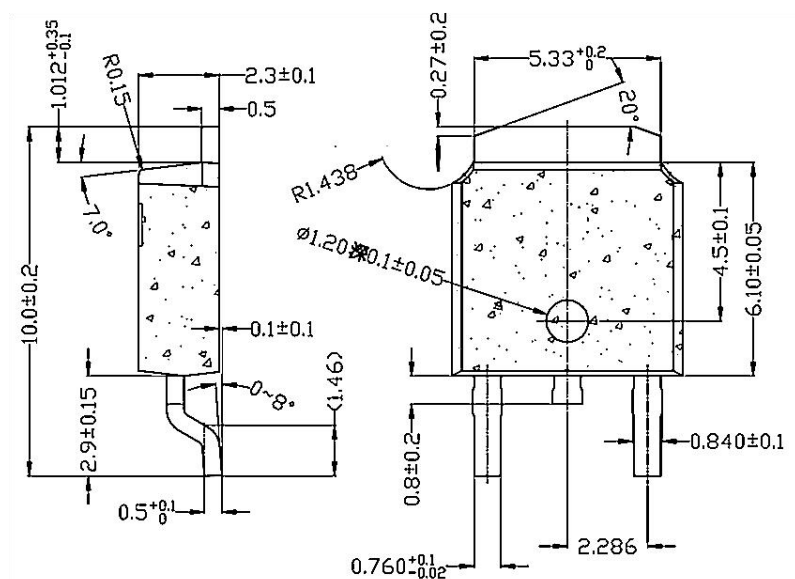
Saturation Voltage



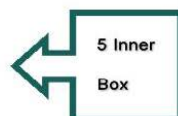
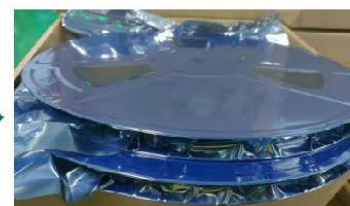
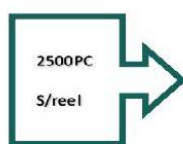
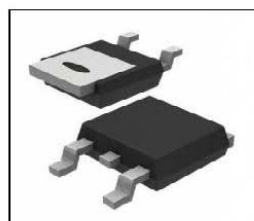
Collector Output Capacitance



TO - 252 PACKAGE OUTLINE DIMENSIONS



TO - 252 PACKING INFORMATION

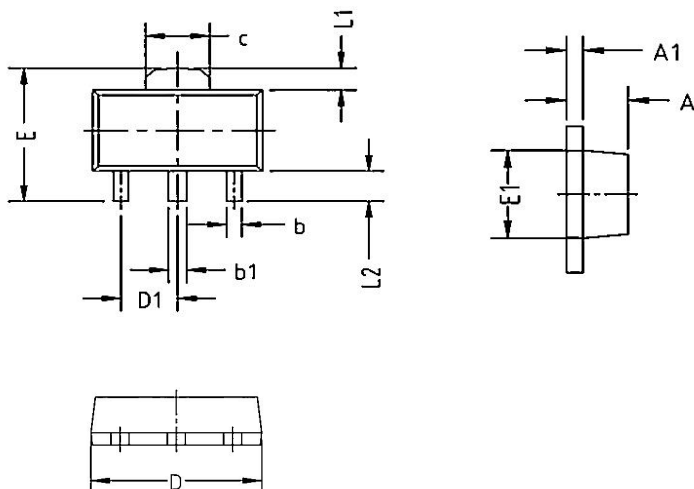


Outer box

Inner box

Package version	Reel dimensions $\phi \times H$ (mm)	Per Reel (pcs)	Reels per box	Inner box dimensions $L \times W \times H$ (mm)	Outer box (pcs)	Outer box dimensions $L \times W \times H$ (mm)
TO-252	$\phi 330 \times 20$	2500	2	360*340*50	25000	375*375*280

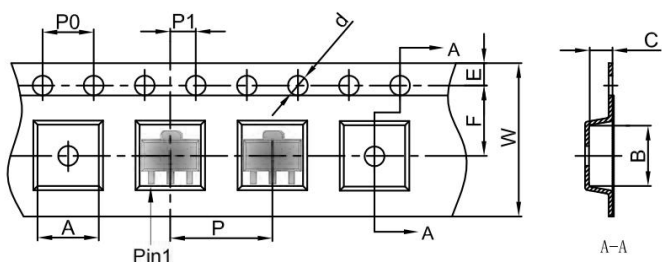
SOT89 PACKAGE OUTLINE DIMENSIONS



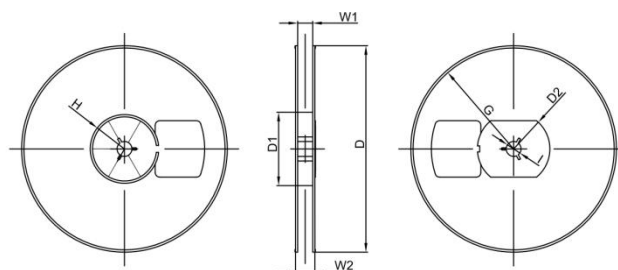
COMMON DIMENSION(MM)			
PKG Symbol	SOT-89		
	MIN	MON	MAX
A	1.450	1.500	1.550
A1	0.350	0.400	0.450
b	0.350	0.400	0.48
b1	0.430	0.480	0.550
C	1.500	1.550	1.650
D	4.450	4.550	4.700
D1	1.470	1.500	1.550
E	4.100	4.200	4.300
E1	2.500	2.550	2.650
L1	0.650	0.700	0.750
L2	0.900	0.950	1.000

SOT89 PACKAGING INFORMATION

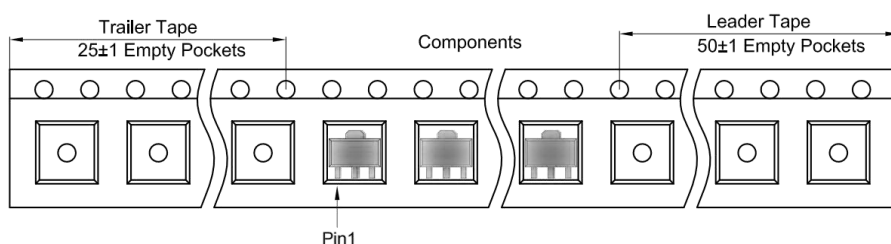
SOT-89 Embossed Carrier Tape



SOT-89 Reel



SOT-89 Tape Leader and Trailer



REEL	Reel Size
1000 pcs	7 inch

Dimensions are in millimeter

Reel Option	D	D1	D2	G	H	I	W1	W2
7"Dia	Ø180.00	60.00	R32.00	R86.50	R30.00	Ø13.00	13.20	16.50

Dimensions are in millimeter

Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-89-3L	4.85	4.45	1.85	Ø1.50	1.75	5.50	4.00	8.00	2.00	12.00

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