

PNP Epitaxial Planar Silicon Transistor

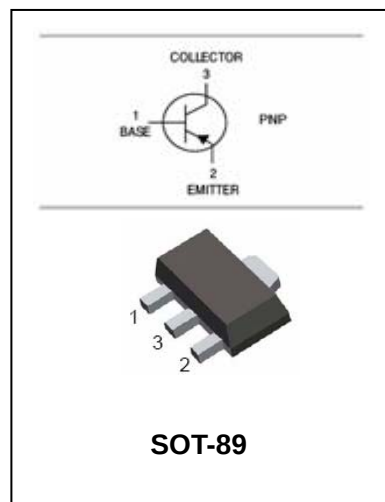
2SA1736

FEATURES

- Low saturation voltage:
 $V_{CE(sat)} = -0.5 \text{ V (max)} (I_C = -1.5 \text{ A})$
- High speed switching time: $t_{stg} = 0.2 \mu\text{s (typ.)}$
- Complementary to 2SC4541



Lead-free



APPLICATIONS

- High-Voltage Driver Applications

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1736	LD	SOT-89

MAXIMUM RATING @ $T_a = 25^\circ\text{C}$ unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-3	A
I_B	Base current	-0.6	A
P_C	Collector Dissipation	0.5 1 Note1	W W
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	$^\circ\text{C}$

Note1: Mounted on ceramic substrate(250mm²*0.8t)



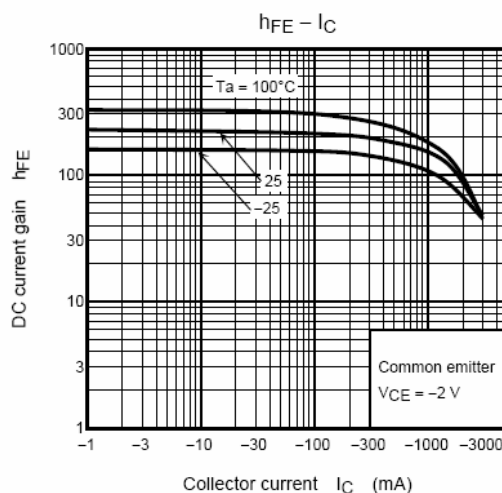
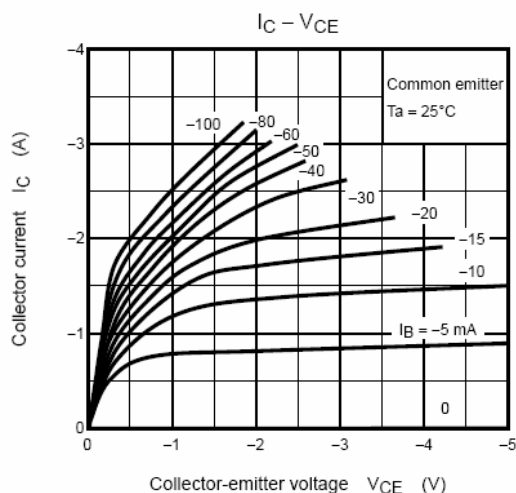
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ELECTRICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified

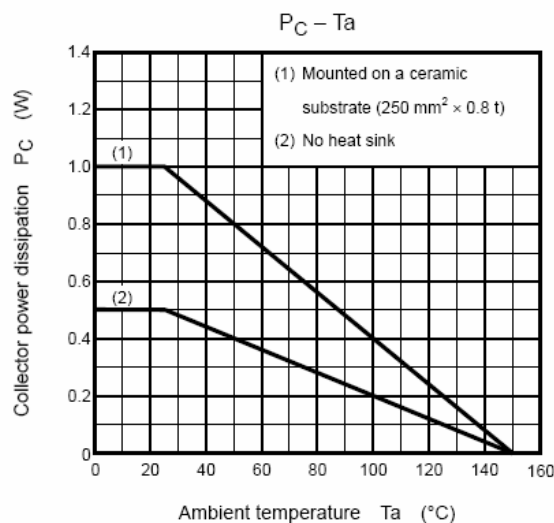
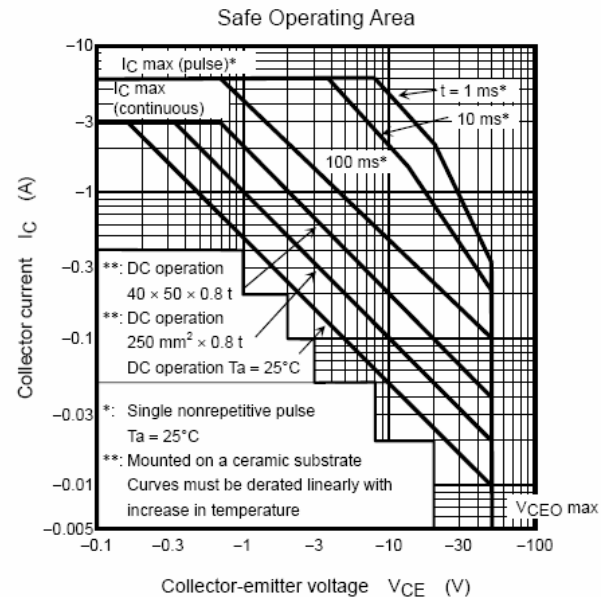
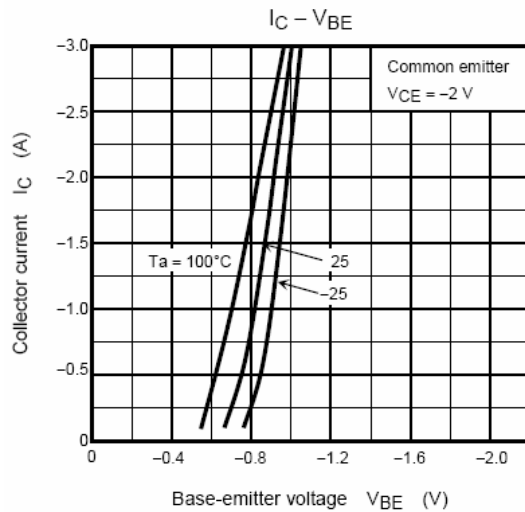
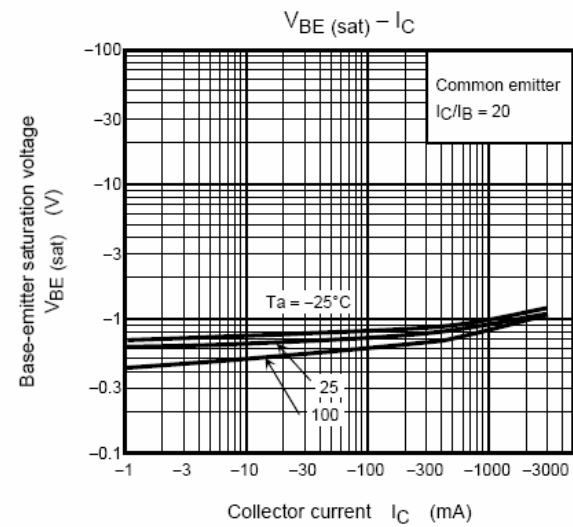
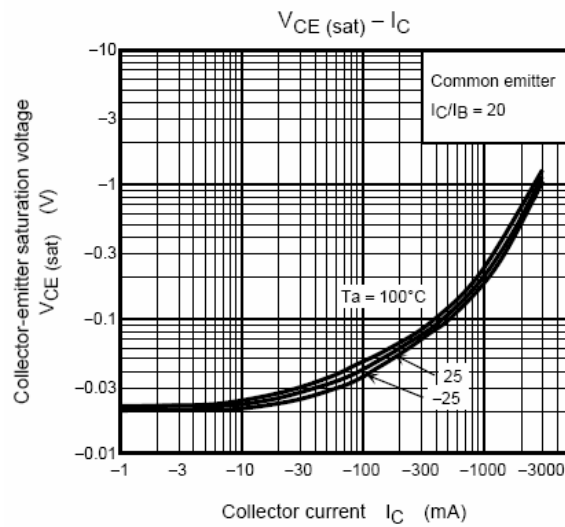
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector- emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-10\text{mA}, I_B=0$	-50			V
Collector cut-off current	I_{CBO}	$V_{CB}=-60\text{V}, I_E=0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-6\text{V}, I_C=0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE}=-2\text{V}, I_C=-100\text{mA}$	120		400	
	$h_{FE(2)}$	$V_{CE}=-2\text{V}, I_C=-2\text{A}$	40			
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-1.5\text{A}, I_B=-75\text{mA}$			-0.5	V
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-1.5\text{A}, I_B=-75\text{mA}$			-1.2	V
Transition frequency	f_T	$V_{CE}=-2\text{V}, I_C=-100\text{mA}$		100		MHz
Output capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		32		pF
Turn-ON Time	t_{on}	$V_{CC}=-30\text{V}$ $I_{B1}=I_{B2}=75\text{mA}$		0.1		μS
Storage time	t_{stg}			0.2		
Fall time	t_f			0.1		

TYPICAL CHARACTERISTICS @ $T_a=25^\circ\text{C}$ unless otherwise specified



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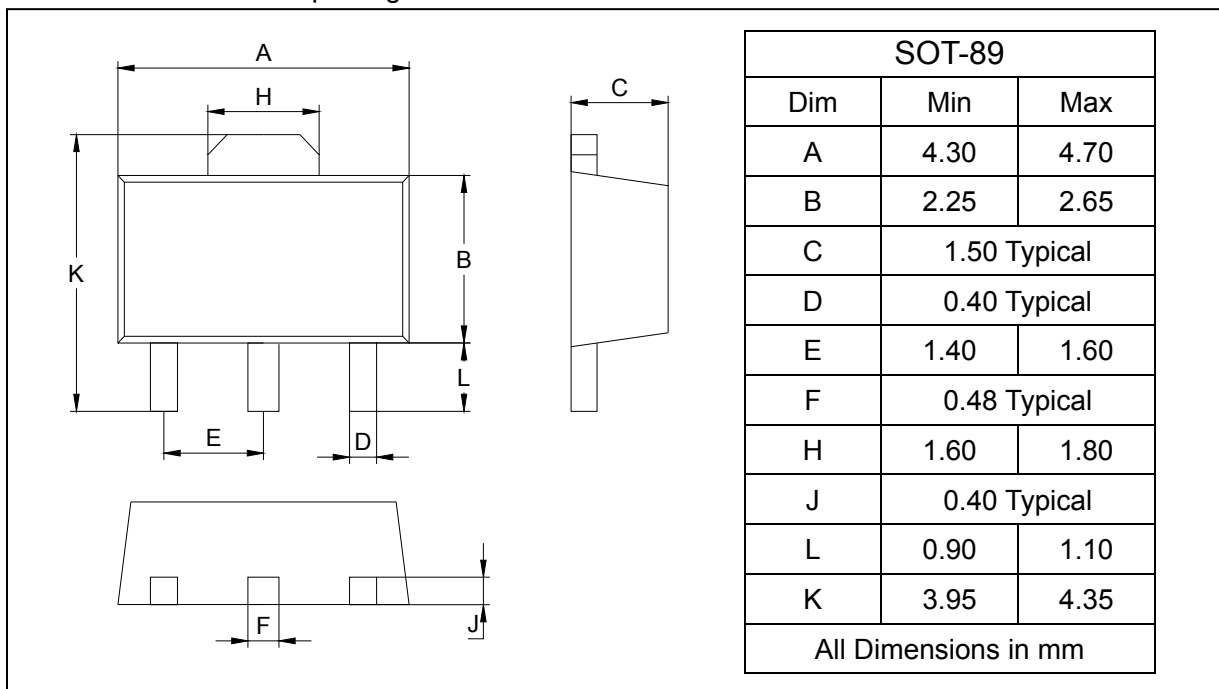
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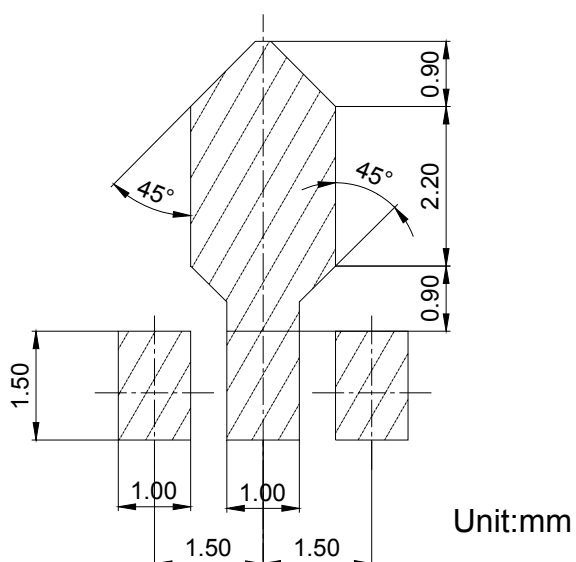
PACKAGE OUTLINE

Plastic surface mounted package

SOT-89



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
2SA1736	SOT-89	1000/Tape&Reel