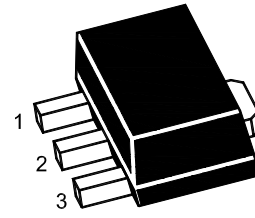


**Features**

- Ideal for switching and amplifier applications
- Ideally suited for automated assembly processes

Mechanical Data

- Case Material: molded plastic, "Green" molding compound.
- UL flammability classification rating 94V-0
- Terminals: solderable per MIL-STD-202,method 208

SOT-89

1.Base 2.Collector 3.Emitter

Marking: MPSA92**Absolute Maximum Ratings**Ratings at $T_A=25^{\circ}\text{C}$ ambient temperature unless otherwise specified.

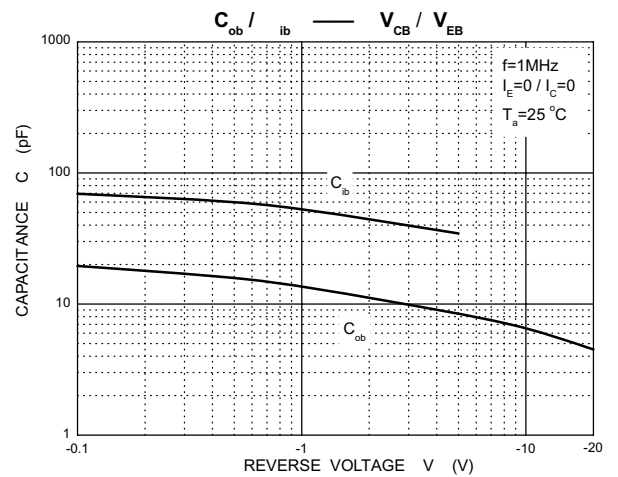
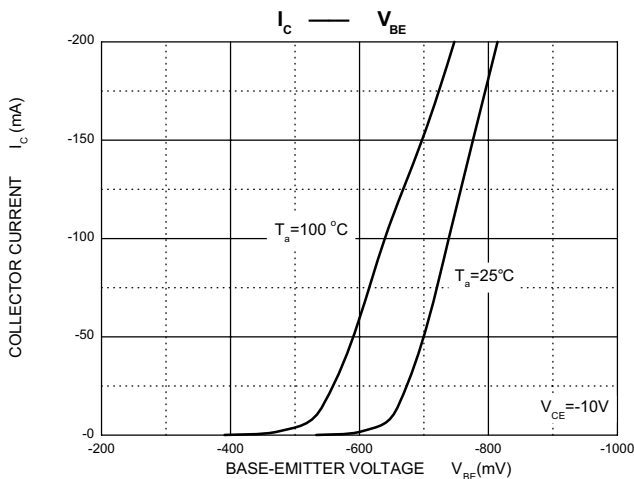
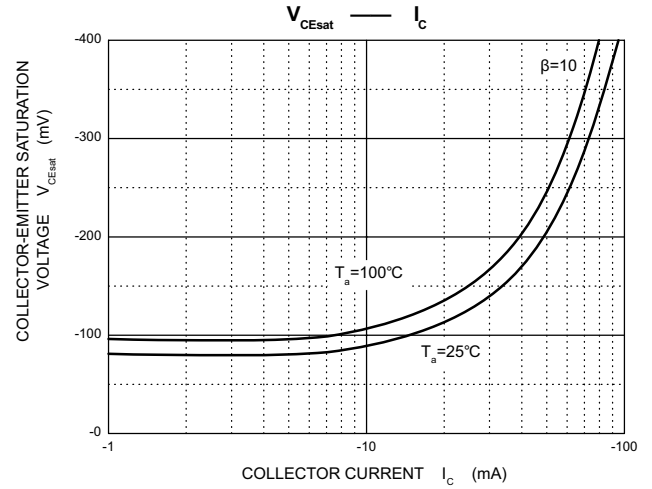
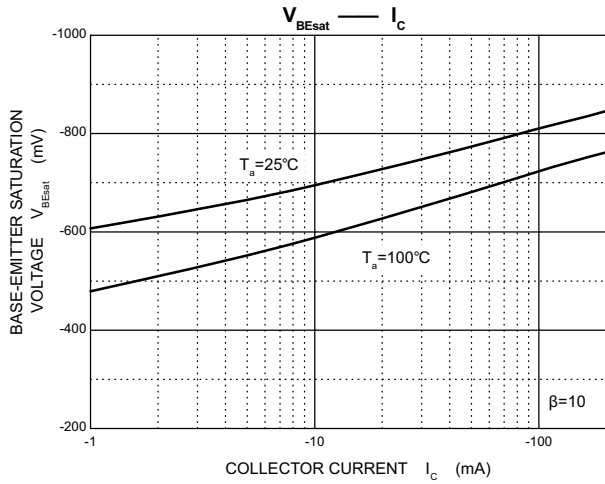
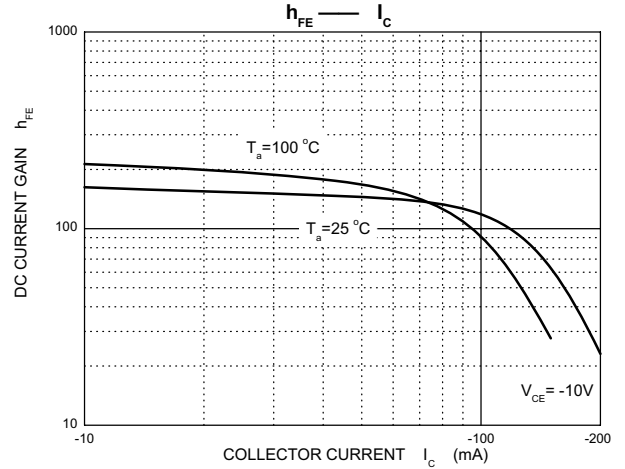
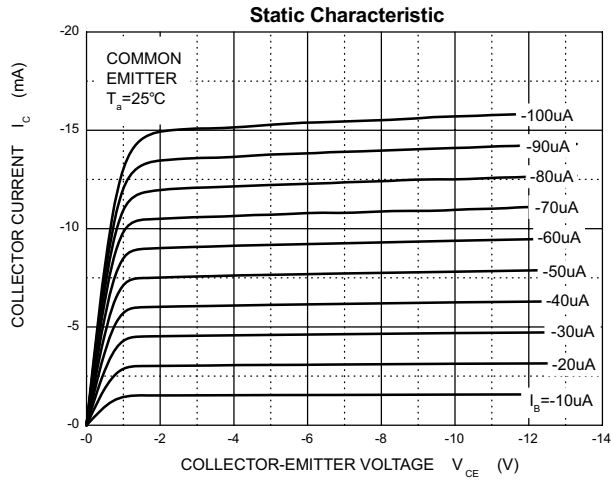
Parameter	Symbols	Value	Units
Collector Base Voltage	$-V_{CBO}$	300	V
Collector Emitter Voltage	$-V_{CEO}$	300	V
Emitter Base Voltage	$-V_{EBO}$	5	V
Collector Current	$-I_C$	500	mA
Power Dissipation	P_D	500	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

Electrical CharacteristicsRatings at $T_A=25^{\circ}\text{C}$ ambient temperature unless otherwise specified.

Parameter	Symbol	Min.	Max.	Units	
DC Current Gain	at $-I_C = 1\text{ mA}$, $-V_{CE} = 10\text{ V}$	h_{FE}	25	-	
	at $-I_C = 10\text{ mA}$, $-V_{CE} = 10\text{ V}$	h_{FE}	40	-	
	at $-I_C = 30\text{ mA}$, $-V_{CE} = 10\text{ V}$	h_{FE}	25	-	
Collector Base Cutoff Current	at $-V_{CB} = 200\text{ V}$	$-I_{CBO}$	-	0.25	μA
Emitter Base Cutoff Current	at $-V_{EB} = 3\text{ V}$	$-I_{EBO}$	-	0.1	μA
Collector Base Breakdown Voltage	at $-I_C = 100\text{ }\mu\text{A}$	$-V_{(BR)CBO}$	300	-	V
Collector Emitter Breakdown Voltage	at $-I_C = 1\text{ mA}$	$-V_{(BR)CEO}$	300	-	V
Emitter Base Breakdown Voltage	at $-I_E = 100\text{ }\mu\text{A}$	$-V_{(BR)EBO}$	5	-	V
Collector Emitter Saturation Voltage	at $-I_C = 20\text{ mA}$, $-I_B = 2\text{ mA}$	$-V_{CE(sat)}$	-	0.5	V
Base Emitter Saturation Voltage	at $-I_C = 20\text{ mA}$, $-I_B = 2\text{ mA}$	$-V_{BE(sat)}$	-	0.9	V
Gain Bandwidth Product at $-I_C = 10\text{ mA}$, $-V_{CE} = 20\text{ V}$, $f = 100\text{ MHz}$	f_T	50	-	MHz	
Collector Output Capacitance	at $-V_{CB} = 20\text{ V}$, $f = 1\text{ MHz}$	C_{ob}	-	6	pF



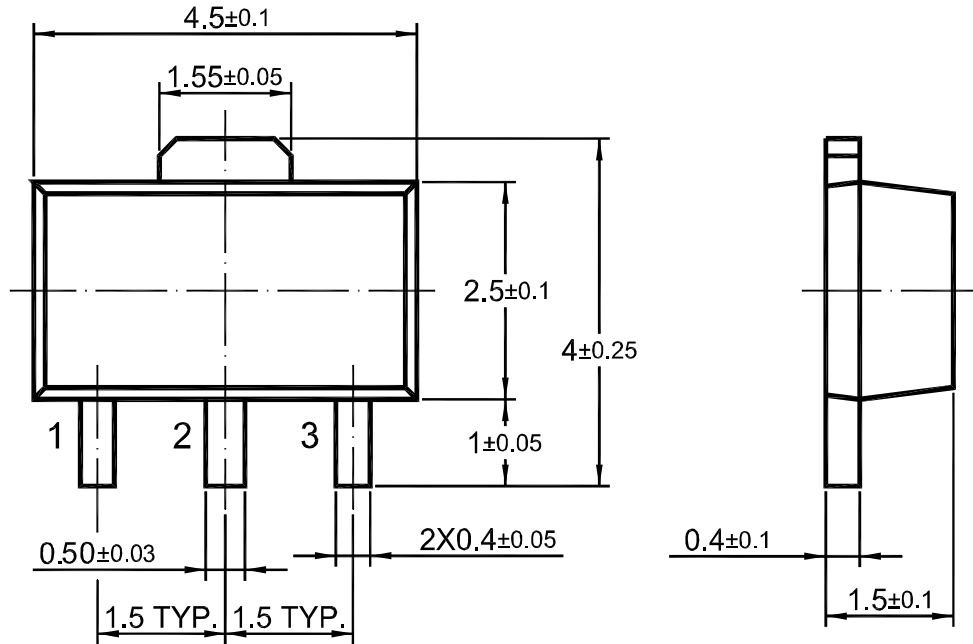
Typical Characteristics Curves





Package Outline

SOT-89
unit in mm



Ordering information

Device	Package	Shipping
MPSA92SQ	SOT-89	1000PCS/Reel&Tape