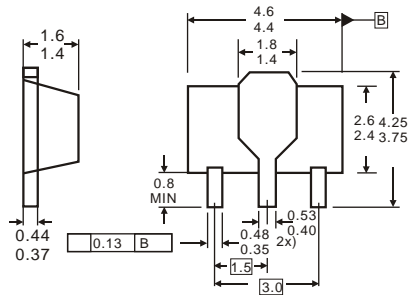
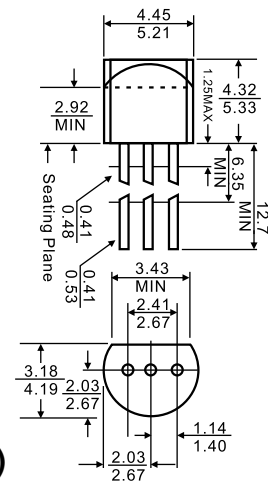


### FEATURES

- \* Collector-Emitter voltage:  $V_{CE0} = -400V$
- \* Low collector-Emitter saturation voltage



**SOT-89**



**TO-92**

Dimensions in inches and (millimeters)

### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
MPSA94L-AB3-R	MPSA94G-AB3-R	SOT-89	B	C	E	Tape Reel
MPSA94L-T92-B	MPSA94G-T92-B	TO-92	E	B	C	Tape Box
MPSA94L-T92-K	MPSA94G-T92-K	TO-92	E	B	C	Bulk

Note: Pin Assignment: B: Base C: Collector E: Emitter

MPSA94G-AB3-R	(1)Packing Type	(1) R: Tape Reel, B: Tape Box, K: Bulk
	(2)Package Type	(2) AB3: SOT-89, T92: TO-92
	(3)Green Package	(3) G: Halogen Free and Lead Free, L: Lead Free

### ABSOLUTE MAXIMUM RATING (Operating temperature range applies unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	-400	V
Collector-Emitter Voltage	$V_{CEO}$	-400	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Power Dissipation ( $T_A=25^\circ C$ )	SOT-89	500	mW
	TO-92	625	mW
Collector Current	$I_C$	-300	mA
Junction Temperature	$T_J$	+150	$^\circ C$
Storage Temperature	$T_{STG}$	-40 ~ +150	$^\circ C$

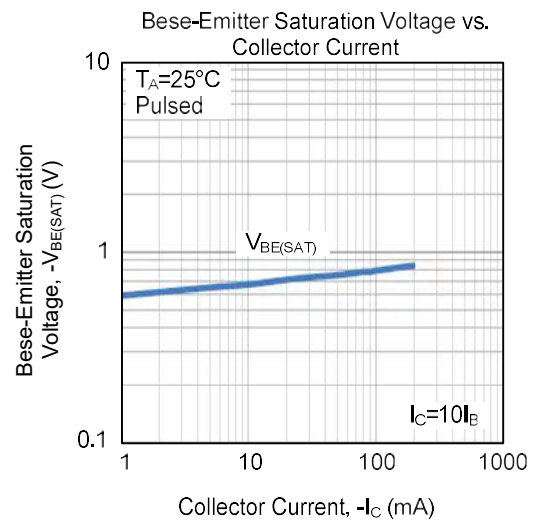
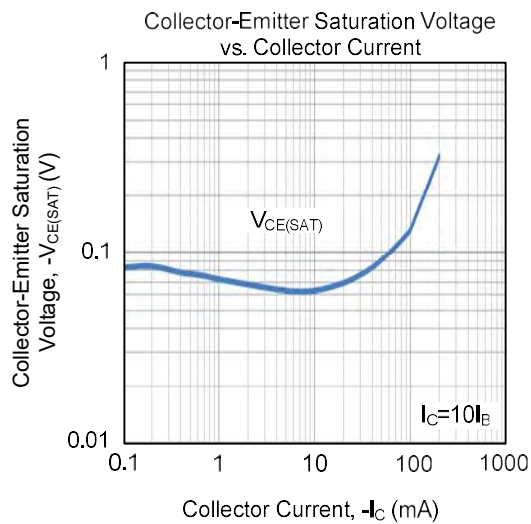
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

### ■ ELECTRICAL CHARACTERISTICS (T<sub>J</sub>=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CB0</sub>	I <sub>C</sub> =-100μA, I <sub>E</sub> =0	-400			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =-1mA, I <sub>B</sub> =0	-400			V
Collector-Emitter Breakdown Voltage	BV <sub>CES</sub>	I <sub>C</sub> =-100μA, V <sub>BE</sub> =0	-400			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =-100μA, I <sub>C</sub> =0	-5			V
Collector Cut-off Current	I <sub>CBO</sub>	V <sub>CB</sub> =-300V, I <sub>E</sub> =0			-100	nA
Collector Cut-off Current	I <sub>CES</sub>	V <sub>CE</sub> =-400V, V <sub>BE</sub> =0			-1	μA
Emitter Cut-off Current	I <sub>EBO</sub>	V <sub>EB</sub> =-4V, I <sub>C</sub> =0			-100	nA
DC Current Gain(note)	h <sub>FE</sub>	V <sub>CE</sub> =-10V, I <sub>C</sub> =-1mA	60		300	
		V <sub>CE</sub> =-10V, I <sub>C</sub> =-10mA	70			
		V <sub>CE</sub> =-10V, I <sub>C</sub> =-50mA	70			
		V <sub>CE</sub> =-10V, I <sub>C</sub> =-100mA	40			
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA I <sub>C</sub> =-50mA, I <sub>B</sub> =-5mA			-0.20 -0.5	V
Base-Emitter Saturation Voltage	V <sub>BE(SAT)</sub>	I <sub>C</sub> =-10mA, I <sub>B</sub> =-1mA			-0.75	V
Output Capacitance	C <sub>ob</sub>	V <sub>CB</sub> =-20V, I <sub>E</sub> =0, f=1MHz			7	pF

Note: Pulse test: Pulse Width<300μs, Duty Cycle<2%.

### ■ TYPICAL CHARACTERISTICS



### TYPICAL CHARACTERISTICS

