



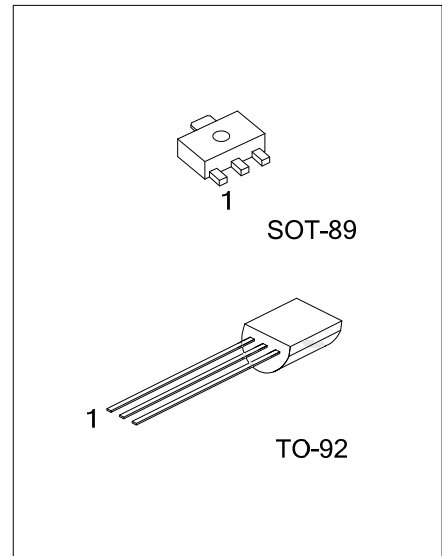
MPSA94

PNP SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR

■ FEATURES

- * Collector-Emitter voltage:
 $V_{CE0} = -400V$
- * Collector Dissipation:
 $P_{D(MAX)} = 625mW$
- * Low collector-Emitter saturation voltage



Lead-free: MPSA94L
Halogen-free: MPSA94G

■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
MPSA94-AB3-R	MPSA94L-AB3-R	MPSA94G-AB3-R	SOT-89	B	C	E	Tape Reel
MPSA94-T92-B	MPSA94L-T92-B	MPSA94G-T92-B	TO-92	E	B	C	Tape Box
MPSA94-T92-K	MPSA94L-T92-K	MPSA94G-T92-K	TO-92	E	B	C	Bulk

<p>MPSA94L-AB3-R</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p>	<p>(1) B: Tape Box, K: Bulk, R: Tape Reel (2) T92: TO-92, AB3: SOT-89 (3) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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■ 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($T_a=25^\circ\text{C}$)	TO-92	625	mW
	SOT-89	500	mW
Collector Current	I_C	-300	mA
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

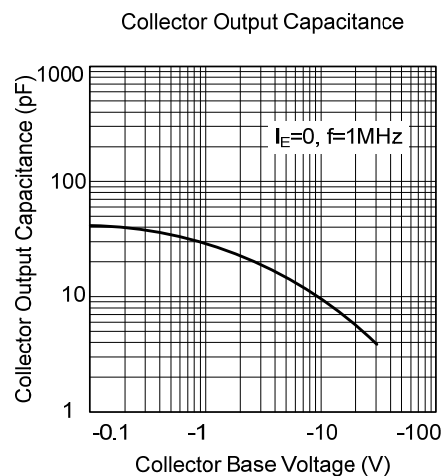
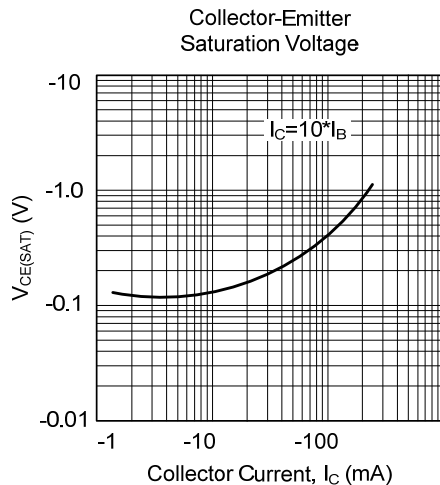
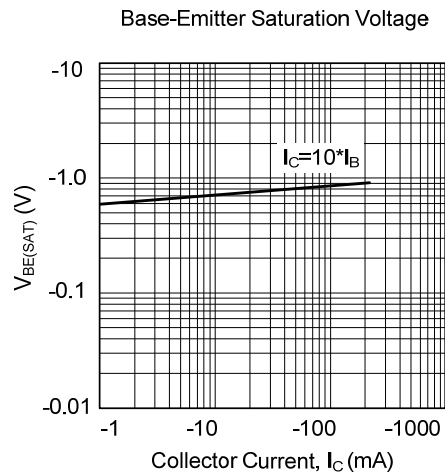
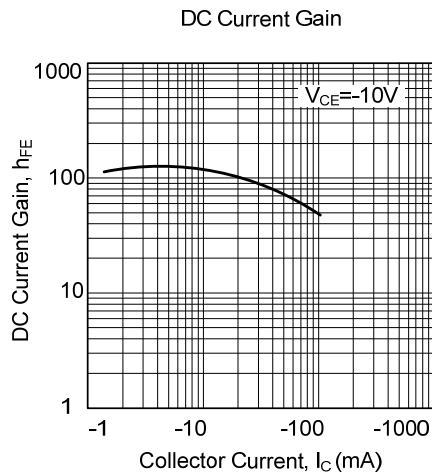
Note Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_J=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=-100\mu\text{A}, I_E=0$	-400			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=-1\text{mA}, I_B=0$	-400			V
Collector-Emitter Breakdown Voltage	BV_{CES}	$I_C=-100\mu\text{A}, V_{BE}=0$	-400			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector Cut-off Current	I_{CBO}	$V_{CB}=-300\text{V}, I_E=0$			-100	nA
Collector Cut-off Current	I_{CES}	$V_{CB}=-400\text{V}, V_{BE}=0$			-1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=-4\text{V}, I_C=0$			100	nA
DC Current Gain(note)	h_{FE}	$V_{CE}=-10\text{V}, I_C=-1\text{mA}$	60		300	
		$V_{CE}=-10\text{V}, I_C=-10\text{mA}$	70			
		$V_{CE}=-10\text{V}, I_C=-50\text{mA}$	70			
		$V_{CE}=-10\text{V}, I_C=-100\text{mA}$	40			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-10\text{mA}, I_B=-1\text{mA}$			-0.20	V
		$I_C=-50\text{mA}, I_B=-5\text{mA}$			-0.5	
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=-10\text{mA}, I_B=-1\text{mA}$			-0.75	V
Output Capacitance	C_{ob}	$V_{CB}=-20\text{V}, I_E=0, f=1\text{MHz}$			7	pF

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

■ TYPICAL CHARACTERISTICS



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