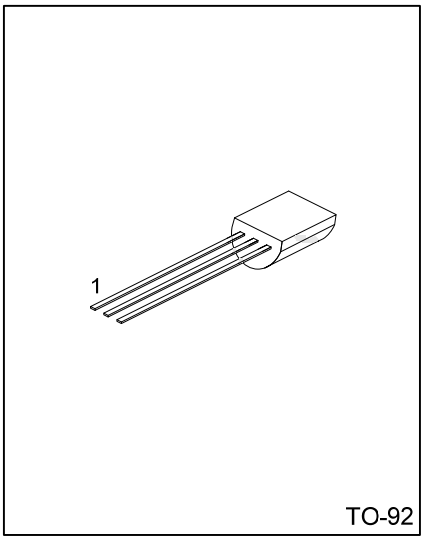
MPSA194

PNP SILICON TRANSISTOR

PNP EPITAXIAL SILICON TRANSISTOR



Lead-free: MPSA194L
Halogen-free: MPSA194G

■ DESCRIPTION

The UTC **MPSA194** is designed for high voltage low power switching applications especially for use in telephone and telecommunication circuits.

■ FEATURES

* Collector-Emitter Voltage: V_{CEO}=400V
* Power Dissipation: 1.0W

■ APPLICATIONS

* Telephone Circuit
* Telecommunication Circuit

■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
MPSA194-T92-B	MPSA194L-T92-B	MPSA194G-T92-B	TO-92	E	B	C	Tape Box
MPSA194-T92-K	MPSA194L-T92-K	MPSA194G-T92-K	TO-92	E	B	C	Bulk

MPSA194L-T92-B
(1)Packing Type
(2)Package Type
(3)Lead Plating

(1) B: Tape Box, K: Bulk,
(2) T92: TO-92
(3) G: Halogen Free, L: Lead Free, Blank: Pb/Sn

■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	-400	V
Collector to Emitter Voltage	V_{CEO}	-400	V
Emitter to Base Voltage	V_{EBO}	-6	V
Collector Current	I_C	-800	mA
Collector Dissipation (Ta=25°C)	P_C	1.0	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

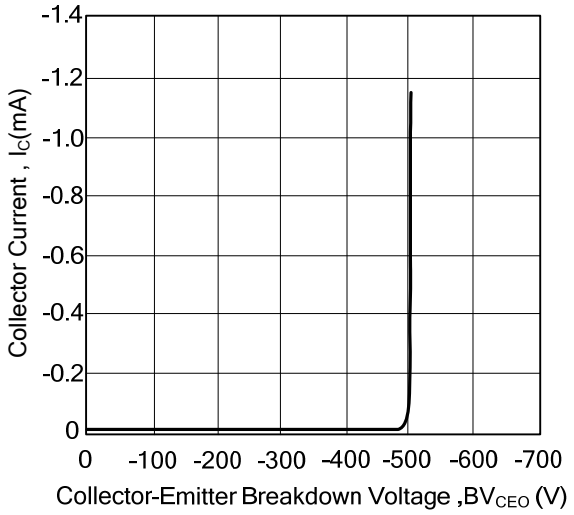
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

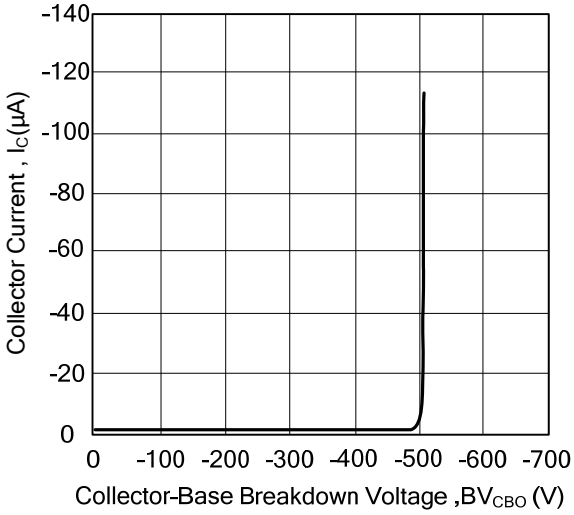
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-100μA, I_E=0A	-400			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=-1mA, I_B=0A	-400			V
Collect Cut-off Current	I_{CBO}	V_{CB}=-400 V, I_E=0A			-10	μA
Collect Cut-off Current	I_{CEO}	V_{CB}=-200 V, V_{BE}=0V			-1	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}= -6 V, I_C=0A			-0.2	μA
DC Current Gain	h_{FE}	V_{CE}=-10 V ,I_C=-1mA	50			
		V_{CE}=-10 V ,I_C=-20mA	50		800	
		V_{CE}=-10 V ,I_C=-80mA	40			
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	I_C=-20mA, I_B=- 2mA			-0.9	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=-20mA, I_B=- 4mA			-0.2	V
		I_C=-80mA, I_B=- 2mA			-1.2	V
Output Capacitance	C_{OB}	V_{CB}=-20 V, I_E=0A, f =1MHz			30	pF
Current Gain Bandwidth Product	f_T	V_{CE}=-20V, I_E=-10A, f =1MHz	10			MH_Z

■ TYPICAL CHARACTERISTICS

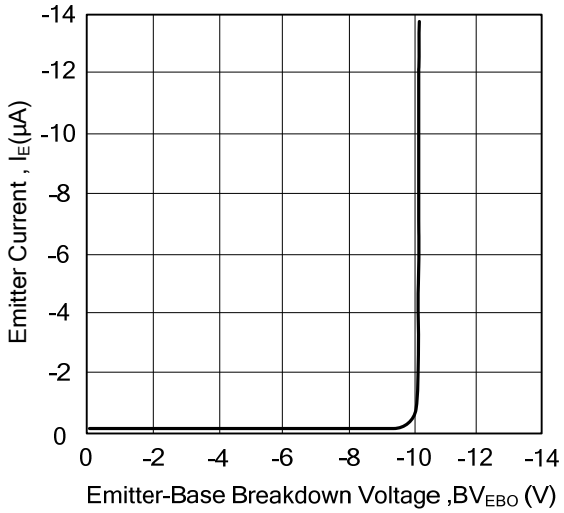
Collector Current VS. BV_{CEO}



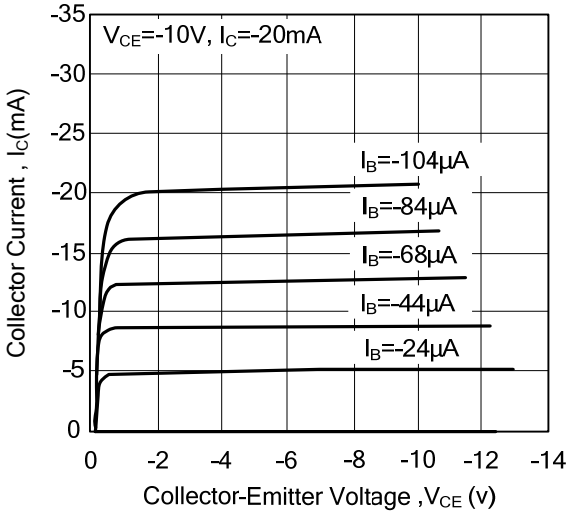
Collector Current VS. BV_{CBO}



Emitter Current VS. BV_{EBO}



DC Current Gain, (hFE)



DC Current Gain, (hFE)