

UTCMPSA194 PNP EPITAXIAL PLANAR TRANSISTOR

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DESCRIPTION

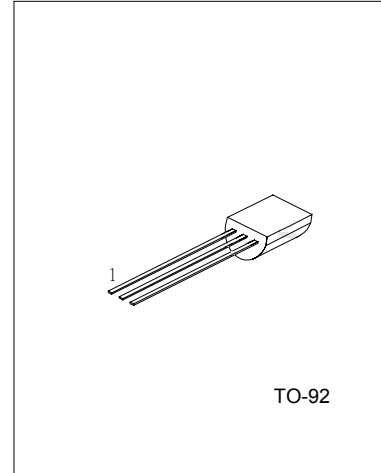
The MPSA194 is designed for high voltage low power switching applications especially for use in telephone and telecommunication circuits.

FEATURES

- *Collector-Emitter Voltage:
 $V_{CE0}=400V$
- *Power Dissipation: 1.0W

APPLICATIONS

- *Telephone circuit
- *Telecommunication circuit



1:EMITTER 2:BASE 3:COLLECTOR

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CB0}	400	V
Collector-emitter voltage	V_{CE0}	400	V
Emitter-base voltage	V_{EB0}	6	V
Collector dissipation($T_a=25^{\circ}C$)	P_c	1.0	W
Collector current	I_c	800	mA
Junction Temperature	T_j	150	$^{\circ}C$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}C$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV_{CB0}	$I_c=100\mu A, I_E=0$	400			V
Collector-emitter breakdown voltage	BV_{CE0}	$I_c=1mA, I_B=0$	400			V
Collector cut-off current	I_{CBO}	$V_{CB}=400V, I_E=0$			10	μA
Collector cut-off current	I_{CEO}	$V_{CB}=200V, V_{BE}=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=6V, I_c=0$			0.2	μA
DC current gain(note)	h_{FE}	$V_{CE}=10V, I_c=1mA$ $V_{CE}=10V, I_c=20mA$ $V_{CE}=10V, I_c=80mA$	50 50 40		800	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_c=20mA, I_B=2mA$ $I_c=80mA, I_B=4mA$			0.2 1.2	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_c=20mA, I_B=2mA$			0.9	V
Current Gain Bandwidth Product	fT	$V_{CE}=20V, I_E=10mA, f=1MHz$	10			MHz
Output capacitance	Cob	$V_{CB}=20V, I_E=0, f=1MHz$			30	pF