

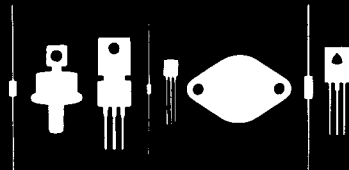
Central
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145 Adams Avenue
Hauppauge, New York 11788



2N5172 NPN TO-92 (ECB)
2N6076 PNP TO-92 (ECB)
MPS5172 NPN TO-92 (EBC)
MPS6076 PNP TO-92 (EBC)
COMPLEMENTARY SILICON TRANSISTOR

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N/MPS5172, 2N/MPS6076 types are Silicon Complementary Small Signal Transistors designed for general purpose applications.

MAXIMUM RATINGS ($T_A=25^\circ\text{C}$)

	SYMBOL		UNIT
Collector-Base Voltage	V_{CB0}	25	V
Collector-Emitter Voltage	V_{CE0}	25	V
Emitter-Base Voltage	V_{EB0}	5.0	V
Collector Current	I_C	100	mA
Power Dissipation	P_D	625	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	$V_{CB}=25\text{V}$		100	nA
I_{CBO}	$V_{CB}=25\text{V}, T_A=100^\circ\text{C}$		10	μA
I_{CES}	$V_{CB}=25\text{V}$		100	nA
I_{EBO}	$V_{EB}=5.0\text{V}$ (2N5172)		100	nA
I_{EBO}	$V_{EB}=3.0\text{V}$ (2N6076)		100	nA
BV_{CEO}	$I_C=10\text{mA}$	25		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.25	V
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.80	V
$V_{BE(ON)}$	$V_{CE}=10\text{V}, I_C=10\text{mA}$	0.5	1.2	V
h_{FE}	$V_{CE}=10\text{V}, I_C=10\text{mA}$	100	500	
h_{fe}	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=1.0\text{kHz}$	100	750	
f_T	$V_{CB}=5.0\text{V}, I_C=2.0\text{mA}$		200TYP	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$	1.0	13	pF

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