

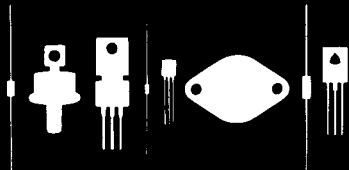
Central  
Semiconductor Corp.

Central  
Semiconductor Corp.

Central  
Semiconductor Corp.

Central  
Semiconductor Corp.

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	$V_{CEO}$	25	V
Emitter-Base Voltage	$V_{EBO}$	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	$\mu\text{A}$
$I_{CES}$	$V_{CB}=25\text{V}$		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

**Central**<sup>TM</sup>  
Semiconductor Corp.

145 Adams Avenue  
Hauppauge, NY 11788 USA  
Tel: (631) 435-1110 • Fax: (631) 435-1824  
www.centrasemi.com