

CentralTM Semiconductor Corp.

145 Adams Ave., Hauppauge, NY 11788 USA
Phone (516) 435-1110 FAX (516) 435-1824

Manufacturers of World Class Discrete Semiconductors

MPQ2907A

PNP SILICON QUAD TRANSISTOR

JEDEC TO-116 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR MPQ2907A type is comprised of four independent Silicon PNP Transistors mounted in a 14 PIN DIP, designed for general purpose amplifier and switching applications.

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

	SYMBOL		UNITS
Collector-Base Voltage	V_{CB0}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	600	mA
Power Dissipation (Each Transistor)	P_D	650	mW
Power Dissipation (Total Package)	P_D	1.9	W
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	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=30\text{V}$			50	nA
I_{EBO}	$V_{CE}=3.0\text{V}$			50	nA
BV_{CEO}	$I_C=10\text{mA}$	60			V
BV_{CBO}	$I_C=10\mu\text{A}$	60			V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0			V
$V_{CE(SAT)}$	$I_C=150\text{mA}$, $I_B=15\text{mA}$			0.4	V
$V_{CE(SAT)}$	$I_C=300\text{mA}$, $I_B=30\text{mA}$			1.6	V
$V_{BE(SAT)}$	$I_C=150\text{mA}$, $I_B=15\text{mA}$			1.3	V
$V_{BE(SAT)}$	$I_C=300\text{mA}$, $I_B=30\text{mA}$			2.6	V
h_{FE}	$V_{CE}=10\text{V}$, $I_C=10\text{mA}$	75			
h_{FE}	$V_{CE}=10\text{V}$, $I_C=150\text{mA}$	100			
h_{FE}	$V_{CE}=10\text{V}$, $I_C=300\text{mA}$	50			
f_T	$V_{CE}=20\text{V}$, $I_C=50\text{mA}$, $f=100\text{MHz}$	200			MHz
C_{ib}	$V_{BE}=2.0\text{V}$, $I_C=0$, $f=1.0\text{kHz}$		6.0	8.0	pF
C_{ob}	$V_{CB}=10\text{V}$, $I_E=0$, $f=1.0\text{kHz}$		20	30	pF
t_{on}	$V_{CC}=30\text{V}$, $I_C=150\text{mA}$, $I_{B1}=15\text{mA}$		30		ns
t_{off}	$V_{CC}=30\text{V}$, $I_C=150\text{mA}$, $I_{B1}=I_{B2}=15\text{mA}$		150		ns