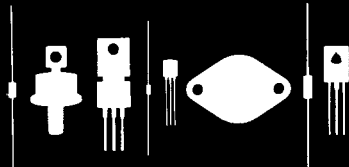


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145 Adams Avenue  
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MPS6530  
MPS6531  
MPS6532

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE

## DESCRIPTION

The CENTRAL SEMICONDUCTOR MPS6530 series types are Silicon NPN Transistors designed for general purpose amplifier applications. The PNP complementary types are MPS6533, MPS6534, MPS6535, respectively.

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

	SYMBOL	MPS6530	MPS6531	MPS6532	UNIT
Collector-Base Voltage	$V_{CB0}$	60	60	50	V
Collector-Emitter Voltage	$V_{CE0}$	40	40	30	V
Emitter-Base Voltage	$V_{EB0}$	5.0	5.0	5.0	V
Collector Current	$I_C$	600	600	600	mA
Power Dissipation	$P_D$	625	625	625	mW
Operating and Storage Temperature	$T_J, T_{stg}$	-65 TO +150			$^\circ\text{C}$

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

SYMBOL	TEST CONDITONS	MPS6530		MPS6531		MPS6532		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
$BV_{CB0}$	$I_C=10\mu\text{A}$	60		60		50		V
$BV_{CE0}$	$I_C=10\text{mA}$	40		40		30		V
$BV_{EB0}$	$I_B=10\mu\text{A}$	5.0		5.0		5.0		V
$I_{CB0}$	$V_{CB}=40\text{V}$		0.05		0.05		-	$\mu\text{A}$
$I_{CB0}$	$V_{CB}=30\text{V}$		-		-		0.1	$\mu\text{A}$
$I_{CB0}$	$V_{CB}=40\text{V}, T_A=60^\circ\text{C}$		2.0		2.0		-	$\mu\text{A}$
$I_{CB0}$	$V_{CB}=30\text{V}, T_A=60^\circ\text{C}$		-		-		5.0	$\mu\text{A}$
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=10\text{mA}$	30		60		-		
$h_{FE}$	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$	40	120	90	270	30	-	
$h_{FE}$	$V_{CE}=10\text{V}, I_C=500\text{mA}$	25		50		-		
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		0.5		0.3		0.5	V
$V_{BE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		1.0		1.0		1.2	V
$C_{ob}$	$V_{CB}=10\text{V}, I_E=0, f=100\text{kHz}$		5.0		5.0		5.0	pF
$f_T$	$V_{CE}=10\text{V}, I_C=50\text{mA}$	300TYP		300TYP		300TYP		MHZ