

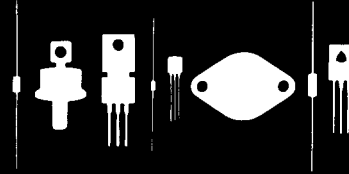
Central Semiconductor Corp.

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145 Adams Avenue  
Hauppauge, New York 11788



2N4258  
2N4258A

PN4258  
PN4258A

JEDEC TO-106

JEDEC TO-92

PNP SILICON SWITCHING TRANSISTOR

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4258,A/PN4258,A types are Silicon PNP Transistors designed for ultra high speed switching applications.

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

	SYMBOL	2N/PN4258	2N/PN4258A	UNIT
Collector-Base Voltage	$V_{CB0}$	12	12	V
Collector-Emitter Voltage	$V_{CES}$	12	12	V
Collector-Emitter Voltage	$V_{CEO}$	12	12	V
Emitter-Base Voltage	$V_{EBO}$	4.5	4.5	V
Collector Current	$I_C$	50	50	mA
Power Dissipation	$P_D$	PN4258,A 625	2N4258,A 310	mW
Operating and Storage Junction Temperature	$T_J, T_{stg}$	-65 TO +150		$^\circ\text{C}$

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

SYMBOL	TEST CONDITIONS	2N/PN4258		2N/PN4258A		UNIT
		MIN	MAX	MIN	MAX	
$I_{CES}$	$V_{CE}=6.0V$		10		10	nA
$I_B$	$V_{CE}=6.0V, V_{BE}=0$		-		1.0	nA
$BV_{CB0}$	$I_C=100\mu A$	12		12		V
$BV_{CES}$	$I_C=100\mu A$	12		12		V
$BV_{CEO}$	$I_C=3.0mA$	12		12		V
$BV_{EBO}$	$I_E=100\mu A$	4.5		4.5		V
$V_{CE(SAT)}$	$I_C=10mA, I_B=1.0mA$		0.15		0.15	V
$V_{CE(SAT)}$	$I_C=50mA, I_B=5.0mA$		0.5		0.5	V
$V_{BE(SAT)}$	$I_C=10mA, I_B=1.0mA$	0.75	0.95	0.75	0.95	V
$V_{BE(SAT)}$	$I_C=50mA, I_B=5.0mA$		1.5		1.5	V
$h_{FE}$	$V_{CE}=0.5V, I_C=1.0mA$	15		15		
$h_{FE}$	$V_{CE}=3.0V, I_C=10mA$	30	120	30	120	
$h_{FE}$	$V_{CE}=1.0V, I_C=50mA$	30		30		
$f_T$	$V_{CE}=10V, I_C=10mA, f=100MHz$	700		700		MHz
$C_{ob}$	$V_{CB}=5.0V, f=140kHz$		3.0		3.0	pF
$C_{ib}$	$V_{EB}=0.5V, f=140kHz$		3.5		3.5	pF
$t_{on}$	$I_C=10mA, I_{B1}=1.0mA$		15		15	ns
$t_{off}$	$I_C=10mA, I_{B1}=I_{B2}=1.0mA$		20		18	ns
$\tau_s$	$I_C=10mA, I_{B1}=I_{B2}=10mA$		20		15	ns