

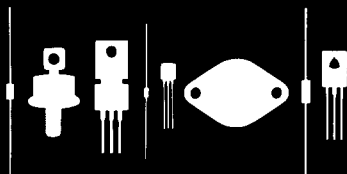
Central
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145 Adams Avenue
Hauppauge, New York 11788



2N524 THRU 2N527

PNP GERMANIUM TRANSISTORS

JEDEC TO-5 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N524 series types are germanium PNP transistors designed for low frequency medium power amplifier and switching applications.

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

	SYMBOL		UNIT
Collector-Base Voltage	V_{CB0}	45	V
Collector-Emitter Voltage	V_{CER}	30	V
Emitter-Base Voltage	V_{EB0}	15	V
Collector Current	I_C	500	mA
Emitter Current	I_E	500	mA
Power Dissipation	P_D	225	mW
Operating and Storage			
Junction Temperature	T_J T_{STG}	-65 to +100	$^\circ\text{C}$
Thermal Resistance	θ_{JA}	33.3	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CB0}	$V_{CB}=30\text{V}$		10	μA
I_{EB0}	$V_{EB}=15\text{V}$		10	μA
BV_{CB0}	$I_C=200\mu\text{A}$	45		V
BV_{CER}	$I_C=600\mu\text{A}$, $R_{BE}=10\text{k}\Omega$	30		V
$V_{CE(SAT)}$	$I_C=20\text{mA}$, $I_B=2.0\text{mA}$ (2N524)		130	mV
$V_{CE(SAT)}$	$I_C=20\text{mA}$, $I_B=1.33\text{mA}$ (2N525)		130	mV
$V_{CE(SAT)}$	$I_C=20\text{mA}$, $I_B=1.0\text{mA}$ (2N526)		130	mV
$V_{CE(SAT)}$	$I_C=20\text{mA}$, $I_B=0.67\text{mA}$ (2N527)		130	mV
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N524)	220	320	mV
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N525)	200	300	mV
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N526)	190	280	mV
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N527)	180	260	mV
h_{FE}	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N524)	25	42	
h_{FE}	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N525)	34	65	
h_{FE}	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N526)	53	90	
h_{FE}	$V_{CE}=1.0\text{V}$, $I_C=20\text{mA}$ (2N527)	72	121	
C_{ob}	$V_{CB}=5.0\text{V}$, $I_C=0$, $f=1.0\text{MHz}$	5.0	40	pF
NF	$V_{CB}=5.0\text{V}$, $R_G=1.0\text{k}\Omega$, $BW=1.0\text{Hz}$, $f=1.0\text{kHz}$	-	15	db

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