



Micro Commercial Components  
 20736 Marilla Street Chatsworth  
 CA 91311  
 Phone: (818) 701-4933  
 Fax: (818) 701-4939

# 2SA1464

## Features

- High  $f_T$ :  $f_T=400$  MHz
- Complementary to 2SC3739

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	40	V
$V_{CBO}$	Collector-Base Voltage	60	V
$V_{EBO}$	Emitter-Base Voltage	5.0	V
$I_C$	Collector Current	500	mA
$P_C$	Collector power dissipation	200	mW
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
<b>OFF CHARACTERISTICS</b>					
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=40Vdc, I_E=0$ )	---	---	100	nAdc
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=4.0Vdc, I_C=0$ )	---	---	100	nAdc

<b>ON CHARACTERISTICS</b>						
$h_{FE(1)}$	DC Current Gain* ( $I_C=150mAdc, V_{CE}=2.0Vdc$ )	75	140	300	---	
$h_{FE(2)}$	DC Current Gain ( $I_C=500mAdc, V_{CE}=2.0Vdc$ )	20	50	---	---	
$V_{CE(sat)}$	Collector Saturation Voltage* ( $I_C=500mAdc, I_B=50mAdc$ )	---	0.45	0.75	Vdc	
$V_{BE(SAT)}$	Base Saturation Voltage* ( $I_C=500mAdc, I_B=50mAdc$ )	---	1.0	1.30	Vdc	
$C_{ob}$	Collector Capacitance ( $V_{CB}=10Vdc, I_E=0, f=1.0MHz$ )	---	5.0	8.0	pF	
$f_T$	Gain Bandwidth product ( $V_{CE}=10Vdc, I_C=20mAdc$ )	150	400	---	MHz	
$t_{on}$	Turn-on Time	$V_{CC}=30V dc,$		---	35	ns
$t_s$	Storage Time	$I_C=150mA dc,$		---	225	ns
$T_{off}$	Turn-off Time	$I_{B1}=I_{B2}=15mA$		---	225	ns

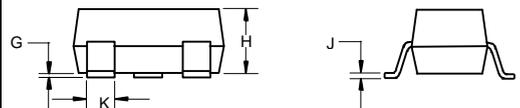
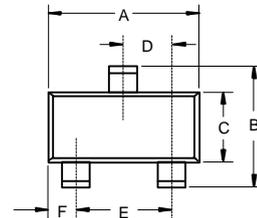
## $h_{FE}$ CLASSIFICATION

Marking	Y12	Y13	Y14
$h_{FE1}$	75-150	100-200	150-300

\* Pulse Test  $PW<350\mu s$ , duty cycle<2%

## PNP Silicon Epitaxial Transistors

### SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	.45	.60	
G	.0005	.0039	.013	.100	
H	.035	.044	.89	1.12	
J	.003	.007	.085	.180	
K	.015	.020	.37	.51	

### Suggested Solder Pad Layout

