



Micro Commercial Components



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**2SA1464-P
2SA1464-Q
2SA1464-R**

Features

- High f_T : $f_T=400\text{MHZ}$
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings @ $T_a = 25^\circ\text{C}$ (unless otherwise noted)

Symbol	Parameter	Value	Unit
I_C	Collector Current	-0.5	A
P_D	Collector Power Dissipation	0.2	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$

Electrical Characteristics @ 25°C Unless Otherwise Specified

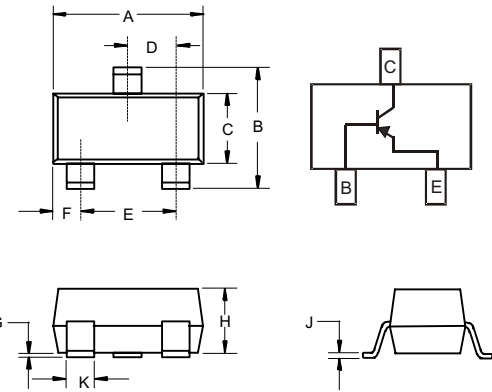
Symbol	Parameter	Min	TYPE	Max	Units
OFF CHARACTERISTICS					
V_{CEO}	Collector-Emitter Breakdown Voltage	-40			V
V_{CBO}	Collector-Base Breakdown Voltage	-60			V
V_{EBO}	Collector-Base Breakdown Voltage	-5.0			V
I_{CBO}	Collector-Base Cutoff Current ($V_{CB}=-40\text{Vdc}$, $I_E=0$)			- 100	nAdc
I_{EBO}	Emitter-Base Cutoff Current ($V_{EB}=-4.0\text{Vdc}$, $I_C=0$)			- 100	nAdc

ON CHARACTERISTICS

H_{FE}	DC Current Gain ($I_C=-150\text{mAdc}$, $V_{CE}=-2.0\text{Vdc}$) ($I_C=-500\text{mAdc}$, $V_{CE}=-2.0\text{Vdc}$)	75 20	140 50	300	
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage * ($I_C=-500\text{mAdc}$, $I_B=-50\text{mAdc}$)		-0.45	-0.75	Vdc
$V_{BE(sat)}$	Base-Emitter Saturation Voltage * ($I_C=-500\text{mAdc}$, $I_B=-50\text{mAdc}$)		-1	-1.3	Vdc
F_T	Gain bandwidth product ($V_{CE}=-10\text{Vdc}$, $I_E=20\text{mAdc}$)	150	400		MHZ
C_{ob}	($V_{CB}=-10\text{Vdc}$, $I_E=0$, $f=1\text{MHZ}$)		5	8	pF
T_{on}	Turn-on time	$V_{CC}=-30\text{V}$,		35	ns
T_{stg}	Storage time	$I_C=150\text{mA}$,		225	ns
T_{off}	Turn-off time	$I_{B1}=-I_{B2}=15\text{mA}$		255	ns

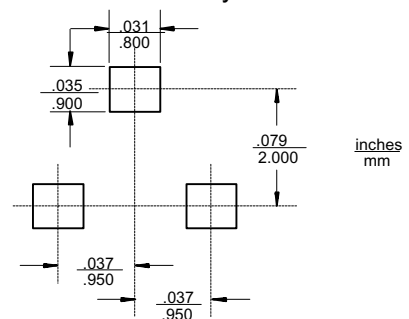
**PNP Silicon
Epitaxial Transistors**

SOT-23



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.104	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	

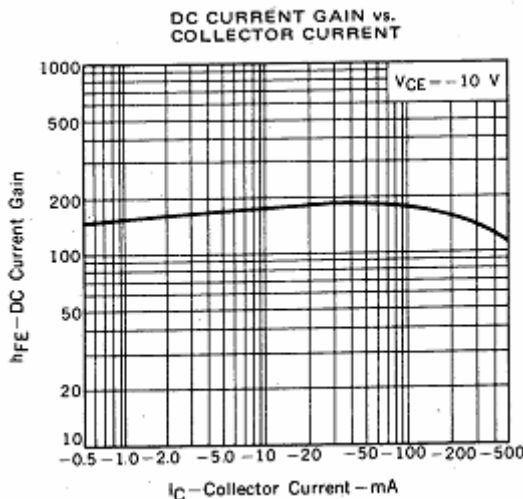
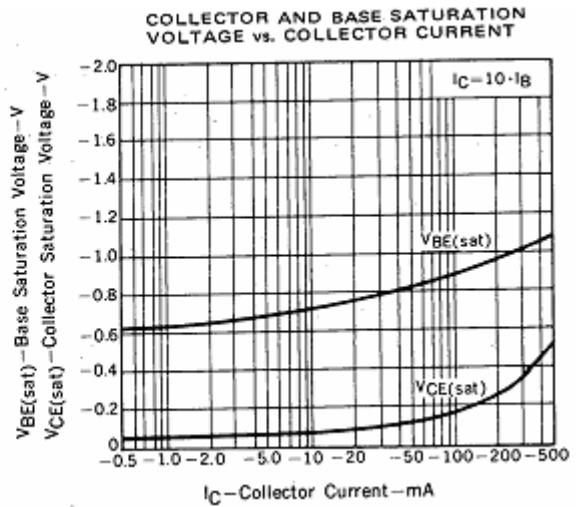
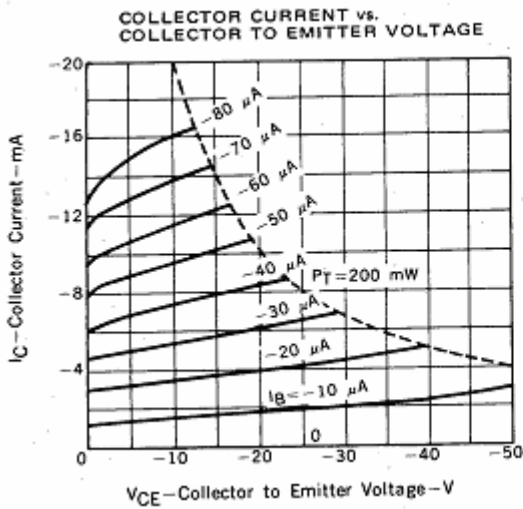
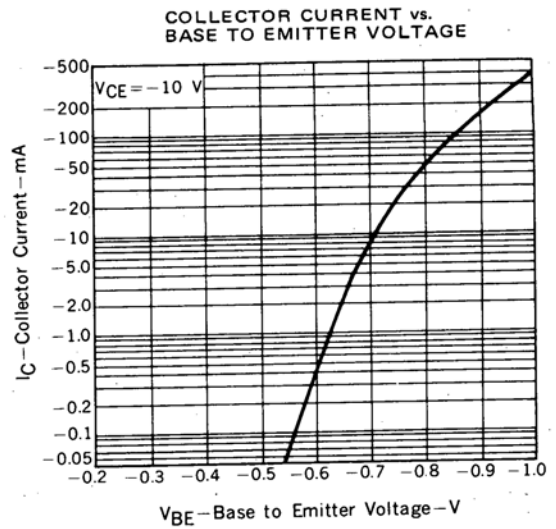
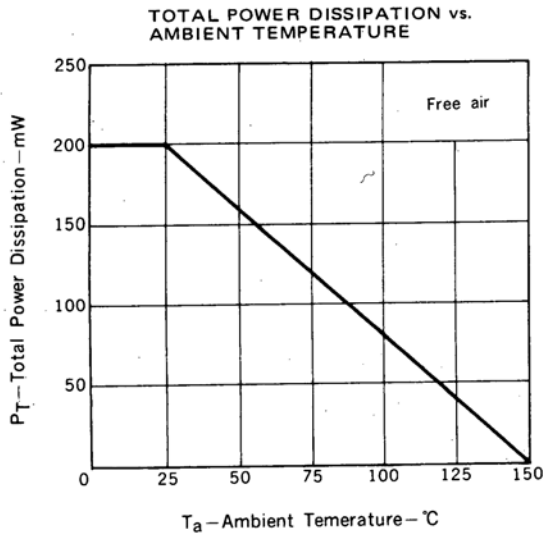
**Suggested Solder
Pad Layout**



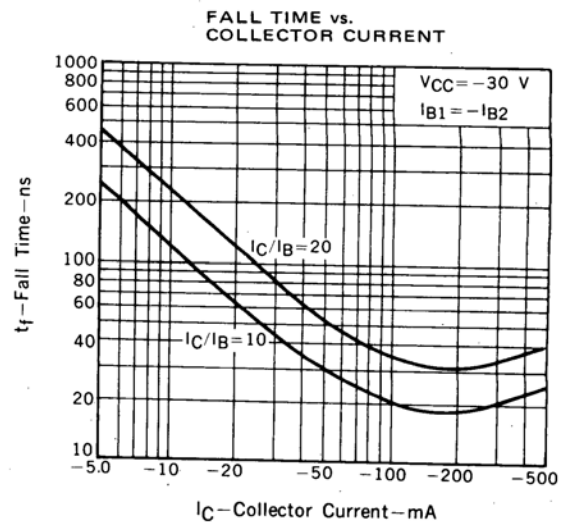
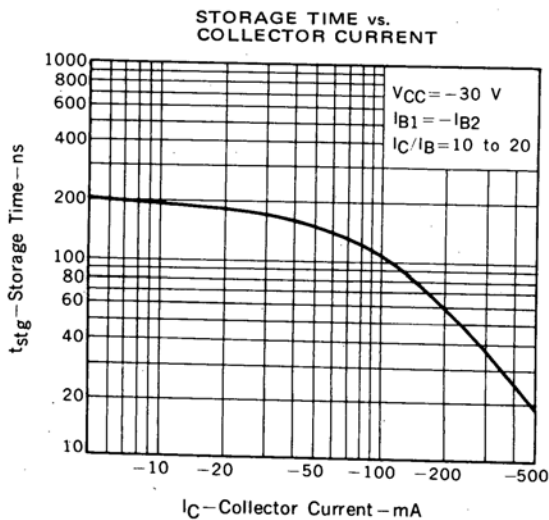
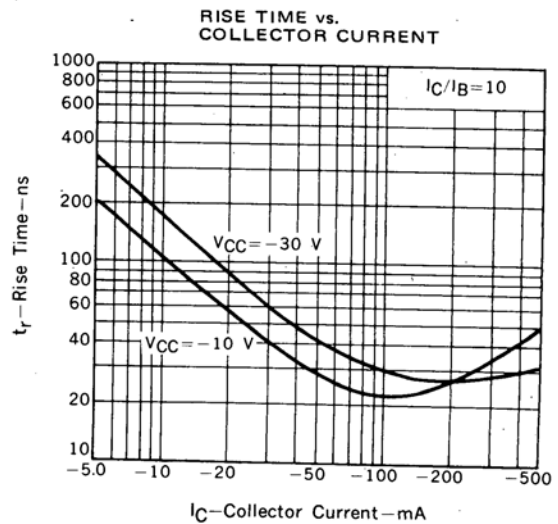
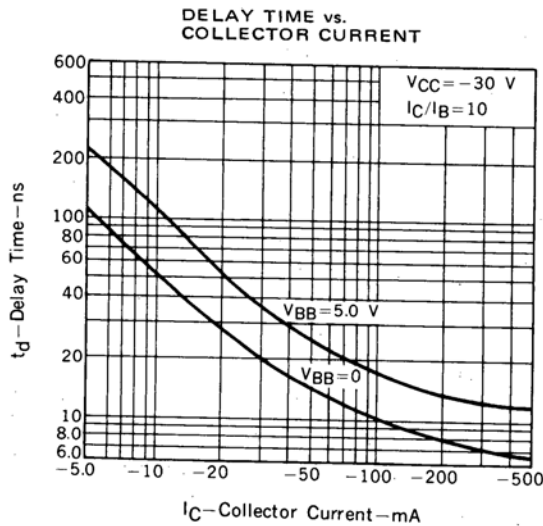
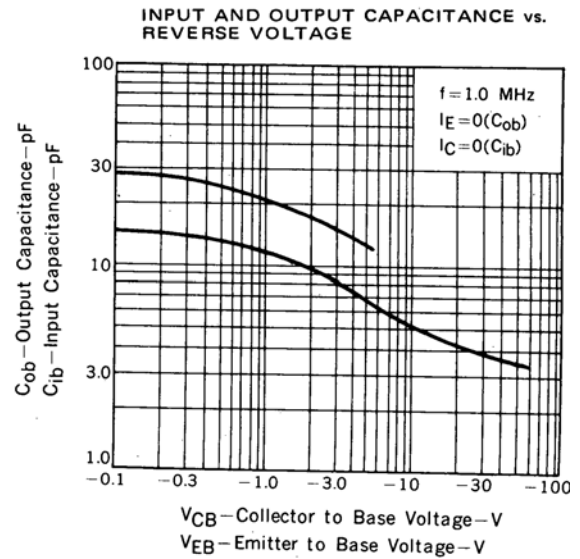
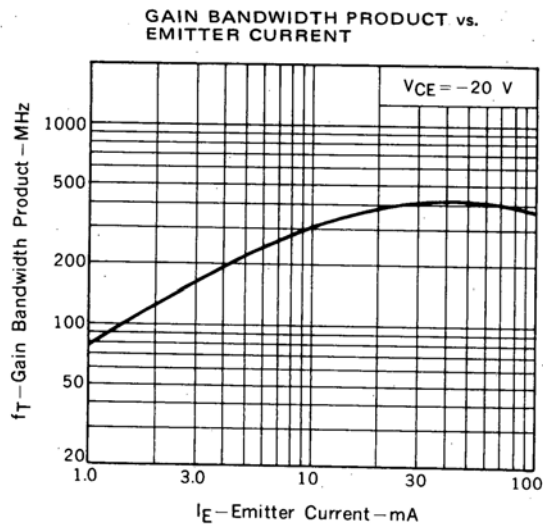
CLASSIFICATION OF h_{FE}

Rank	P	Q	R
Range	75-150	100-200	150-300
Marking	Y12	Y13	Y14

2SA1464 Typical Characteristics



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Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel; 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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