Micro Commercial Components

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2SA1576A-Q
2SA1576A-R
2SA1576A-S

PNP Silicon Epitaxial Transistors

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Excellent h_{FE} Linearity
- Complementary to 2SC4081
- Epoxy meets UL 94 V-0 flammability rating
- Moisure Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

Symbol	Rating	Rating	Unit
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{CBO}	Collector-Base Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-6	V
I_C	Collector Current	-150	mA
P_C	Collector power dissipation	200	mW
T_J	Junction Temperature	150	℃
T_{STG}	Storage Temperature	-55 to +150	℃

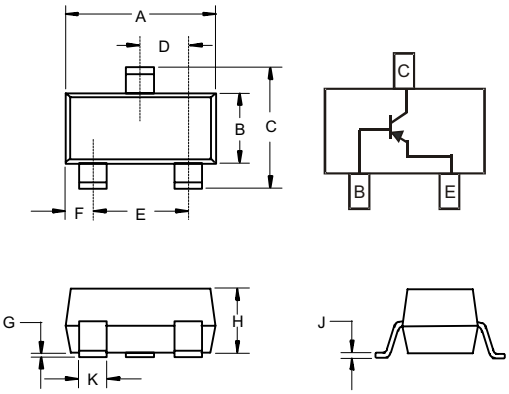
Electrical Characteristics @ 25℃ Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
OFF CHARACTERISTICS					
I_{CBO}	Collector Cutoff Current (V_{CB}=-60Vdc)	---	---	-100	nAdc
I_{EBO}	Emitter Cutoff Current (V_{EB}=-6.0Vdc)	---	---	-100	nAdc
ON CHARACTERISTICS					
BV_{CBO}	Collector-base breakdown voltage (I_C=-50μAdc)	-60	---	---	Vdc
BV_{CEO}	Collector-emitter breakdown voltage (I_C=-1mAdc)	-50	---	---	Vdc
BV_{EBO}	Emitter-base breakdown voltage (I_E=-50μAdc)	-6	---	---	Vdc
h_{FE}	DC Current Gain (I_C=-1mAdc, V_{CE}=-6.0Vdc)	120	---	560	---
$V_{CE(sat)}$	Collector Saturation Voltage (I_C=-50mAdc, I_B=-5.0mAdc)	---	---	-0.5	Vdc
C_{ob}	Output Capacitance (V_{CB}=-12.0Vdc, I_E=0, f=1.0MHz)	---	5.0	---	pF
f_T	Gain Bandwidth product (V_{CE}=-12Vdc, I_E=2mAdc,f=30MHz)	---	100	---	MHz

h_{FE} CLASSIFICATION

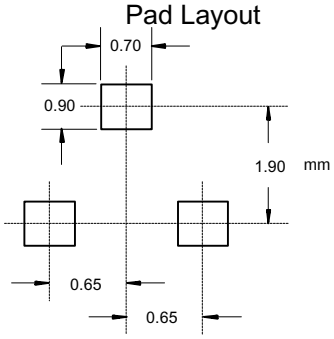
Rank	Q	R	S
h_{FE}	120~270	180~390	270~560
Marking	FQ	FR	FS

SOT-323



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

Suggested Solder Pad Layout



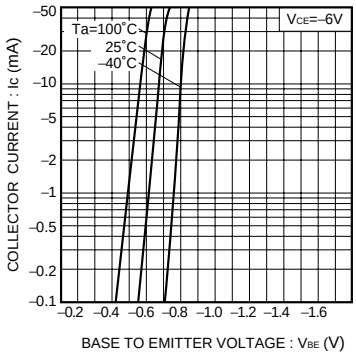


Fig.1 Grounded emitter propagation characteristics

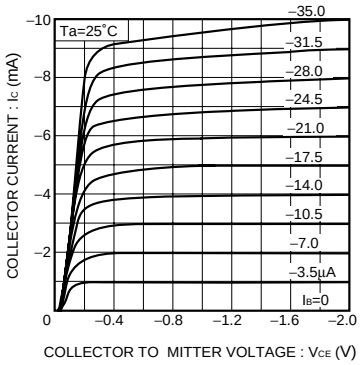


Fig.2 Grounded emitter output characteristics (I)

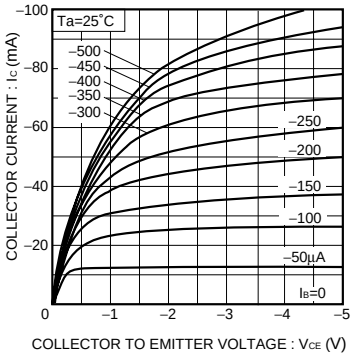


Fig.3 Grounded emitter output characteristics (II)

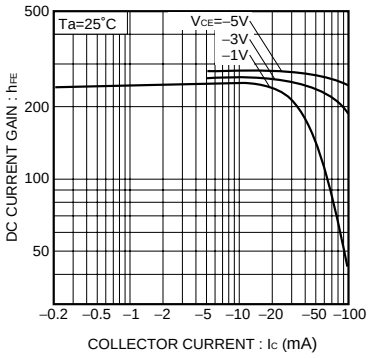


Fig.4 DC current gain vs. collector current (I)

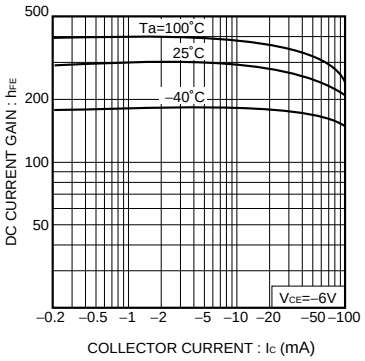


Fig.5 DC current gain vs. collector current (II)

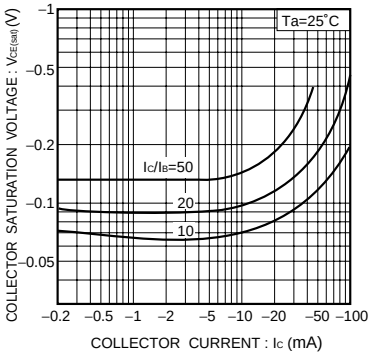


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

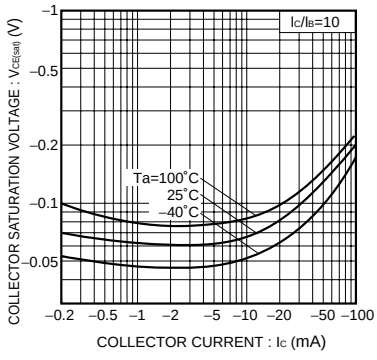


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

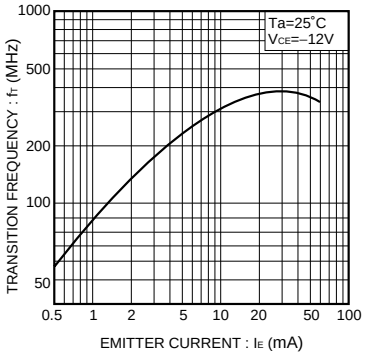


Fig.8 Gain bandwidth product vs. emitter current

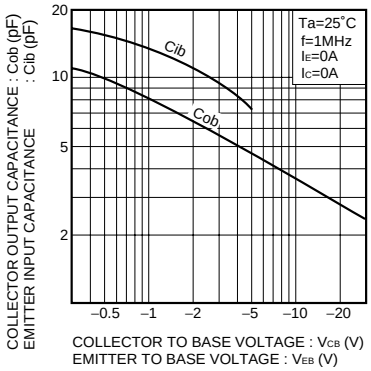


Fig.9 Collector output capacitance vs. collector-base voltage
Emitter inputcapacitance vs. emitter-base voltage

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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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