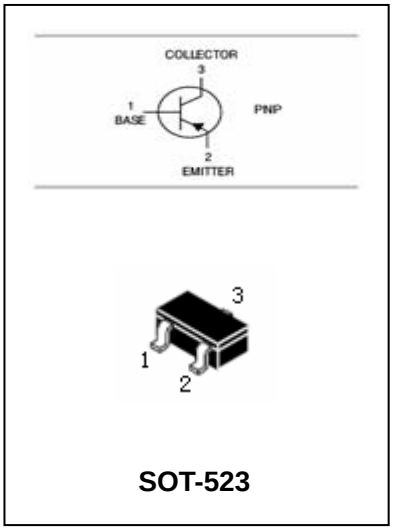
PNP General Purpose Transistor 2SA1774

FEATURES

- Excellent h_{FE} linearity.
- Complementary NPN type available (2SC4617).

Lead-free



SOT-523

APPLICATIONS

- Epitaxial planar type.
- PNP silicon transistor.

ORDERING INFORMATION

Type No.	Marking	Package Code
2SA1774	FQ/FR/FS	SOT-523

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	Parameter	Limits	Unit
V_{CBO}	collector-base voltage	-60	V
V_{CEO}	collector-emitter voltage	-50	V
V_{EBO}	emitter-base voltage	-6	V
I_C	collector current	-150	mA
P_d	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance, junction to Ambient	833	°C/W
T_{stg}	storage temperature range	-55 to +150	°C
T_j	junction temperature	150	°C

PNP General Purpose Transistor 2SA1774

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN.	Typ.	MAX.	UNIT
$V_{(BR)CBO}$	Collector-base breakown voltage	I_C=-50μA,I_E=0	-60			
$V_{(BR)CEO}$	Collector- emitter breakown voltage	I_C=-1μA,I_B=0	-50			
$V_{(BR)BEO}$	Emitter-base breakown voltage	I_E=-50μA,I_C=0	-6			
I_{CBO}	Collector cut-off current	I_E=0,V_{CB}=-60V			-0.1	μA
I_{EBO}	Emitter cut-off current	I_C=0,V_{EB}=-6V			-0.1	μA
h_{FE}	DC current gain	V_{CE}=-6V,I_C=-1mA	120		560	
$V_{CE(sat)}$	collector-emitter saturation voltage	I_C=-50mA,I_B=-5mA			-0.5	V
C_{obo}	Output capacitance	I_E=0,V_{CB}=-12V,f=1MHz		4.0	5.0	pF
f_T	transition frequency	I_C=-2mA,V_{CE} =-12V, f=30MHz		140		MHz

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

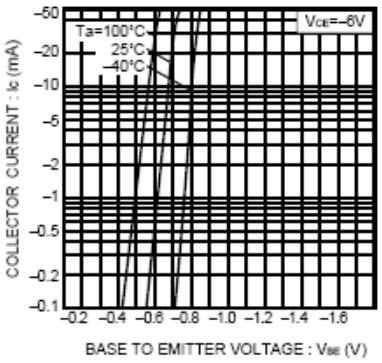


Fig.1 Grounded emitter propagation characteristics

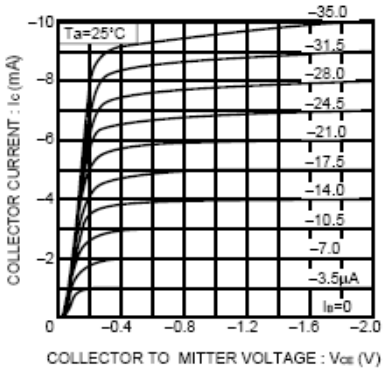


Fig.2 Grounded emitter output characteristics (I)

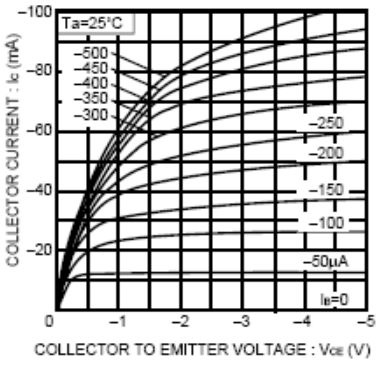


Fig.3 Grounded emitter output characteristics (II)

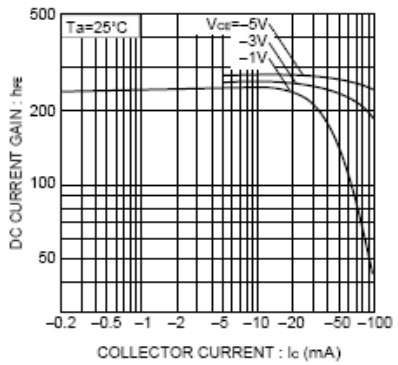


Fig.4 DC current gain vs. collector current (I)

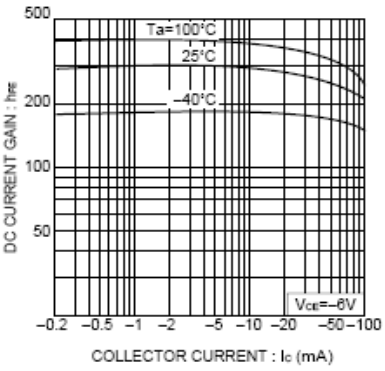


Fig.5 DC current gain vs. collector current (II)

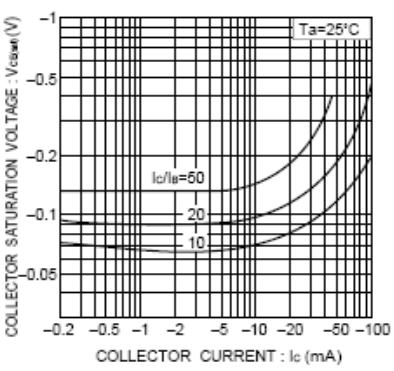


Fig.6 Collector-emitter saturation voltage vs. collector current (I)

PNP General Purpose Transistor 2SA1774

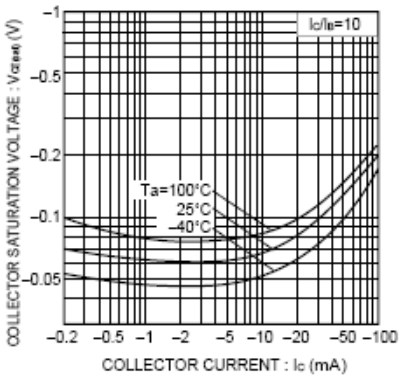


Fig.7 Collector-emitter saturation voltage vs. collector current (II)

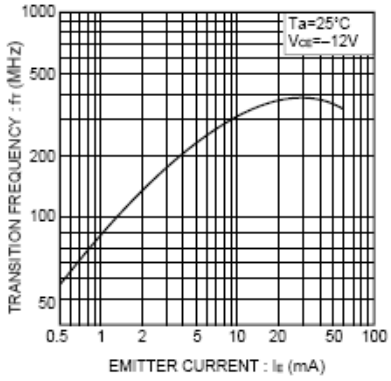


Fig.8 Gain bandwidth product vs. emitter current

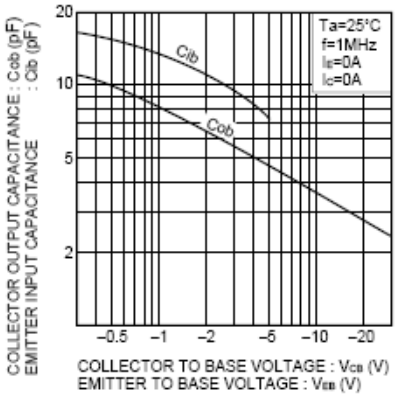
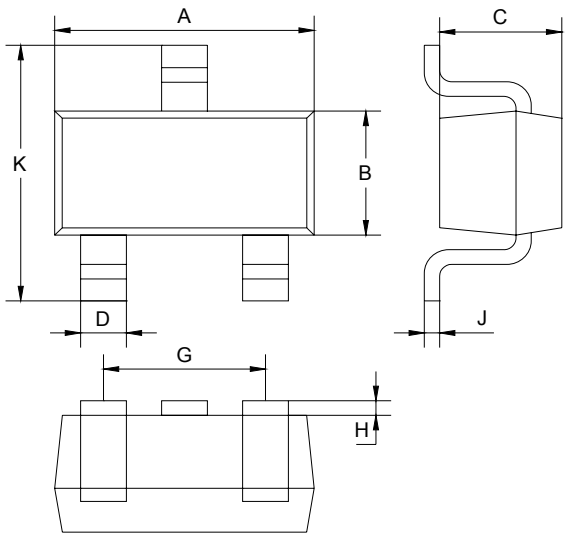


Fig.9 Collector output capacitance vs. collector-base voltage
Emitter inputcapacitance vs. emitter-base voltage

PACKAGE OUTLINE

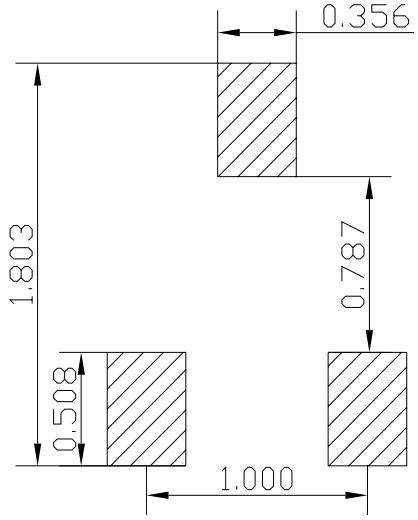
Plastic surface mounted package SOT-523



SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1Typical	
K	1.45	1.75
All Dimensions in mm		

PNP General Purpose Transistor 2SA1774

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
2SA1774	SOT-523	3000/Tape&Reel