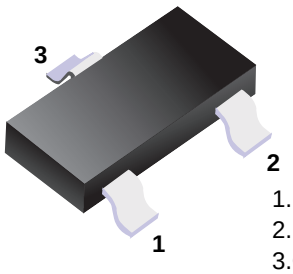
DTA124XCA SOT-23

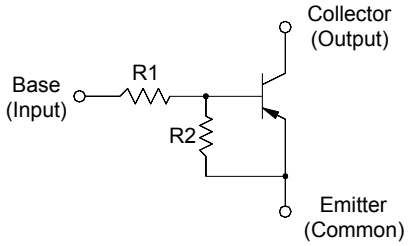
PNP Silicon Epitaxial Planar Transistor

for switching and interface circuit and
drive circuit applicatio



1.Base
2.Emitter
3.Collector

SOT-23



Resistor Values

Type	Marking	R1 (K)	R2 (K)
DTA124XCA	A6L	22	47

Absolute Maximum Ratings (Ta = 25°C)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	-50	V
Collector Emitter Voltage	V_{CEO}	-50	V
Collector Current	I_C	-100	mA
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_S	- 55 to + 150	°C

Characteristics at Ta = 25°C

Parameter		Symbol	Min	Typ	Max	Unit
DC Current Gain at $-V_{CE}$ = 10 V, $-I_C$ = 5 mA		h_{FE}	80	-	-	-
Collector Base Cutoff Current at $-V_{CB}$ = 50 V		I_{CBO}	-	-	-100	nA
Collector Emitter Cutoff Current at $-V_{CE}$ = 50 V		I_{CEO}	-	-	-500	nA
Emitter Base Cutoff Current at $-V_{EB}$ = 6 V		I_{EBO}	-	-	-0.13	mA
Collector Base Breakdown Voltage at $-I_C$ = 10 μA		$V_{(BR)CBO}$	-50	-	-	V
Collector Emitter Breakdown Voltage at $-I_C$ = 2 mA		$V_{(BR)CEO}$	-50	-	-	V
Collector Emitter Saturation Voltage at $-I_C$ = 10 mA, $-I_B$ = 1 mA		V_{CEsat}	-	-	0.25	V
Input voltage	V_{CC} = -5V, I_O = -100μA	$V_{I(off)}$	-	-	-0.4	V
	Vo=-0.3V, Io=-2mA	$V_{I(on)}$	-2.5	-	-	V
Input resistance		R_1	15.4	22	28.6	kΩ
Resistance ratio		R_2/R_1	1.7	2.1	2.6	-

Fig.1 Input voltage vs. output current (ON characteristics)

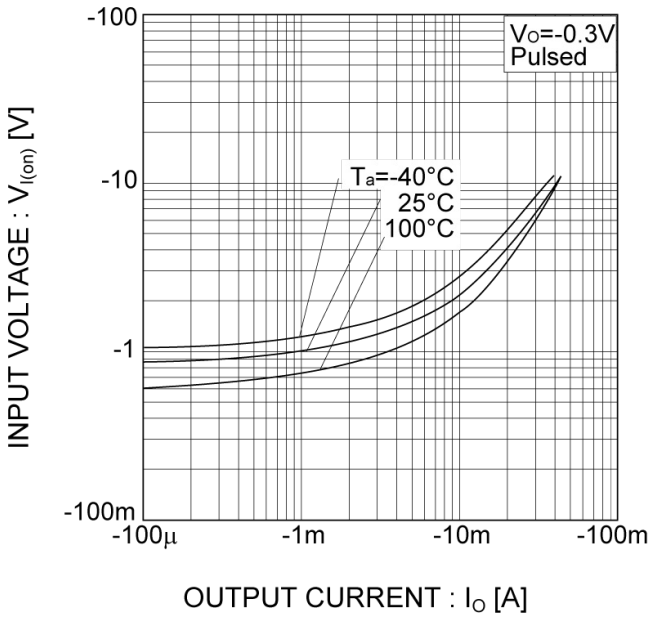


Fig.2 Output current vs. input voltage (OFF characteristics)

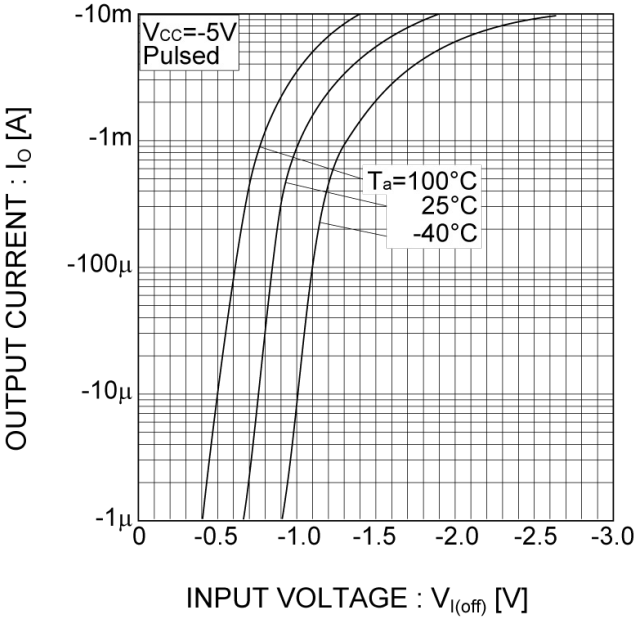


Fig.3 Output current vs. output voltage

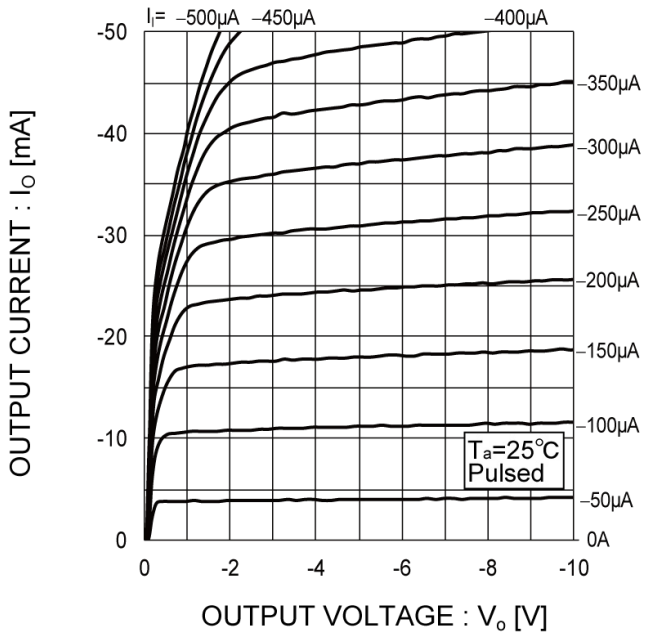
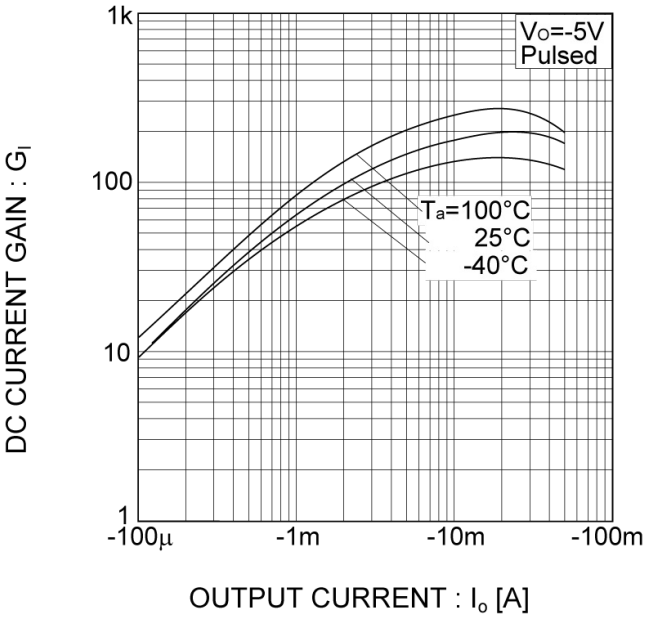


Fig.4 DC current gain vs. output current

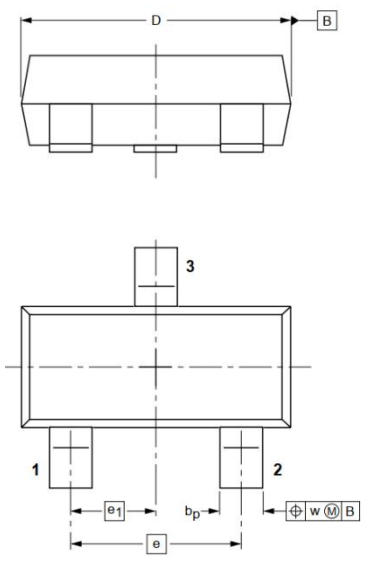


Ordering information

Package	Packing Description	Base Quantity	Packing Quantity
SOT-23	Tape/Reel,7"reel	3000pcs/Reel	24000PCS/Box 120000PCS/Carton

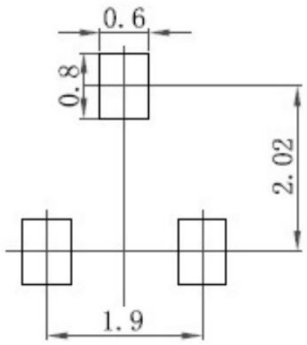
Package Dimensions

SOT-23



Dim.	Millimeter (mm)		mil	
	Min.	Max.	Min.	Max.
A	0.9	1.15	35	45
A1	0.1		3.9	
bp	0.38	0.48	15	19
C	0.09	0.15	3.54	5.9
D	2.8	3.0	110	118
E	1.2	1.4	47	55
e	1.9		75	
e1	0.95		37	
HE	2.1	2.55	83	100
Lp	0.15	0.45	5.9	18
Q	0.45	0.55	18	22
v	0.2		7.9	
W	0.1		4	

The recommended mounting pad size



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