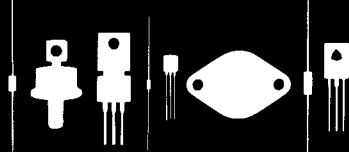


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145 Adams Avenue
Hauppauge, New York 11788



2N4123 2N4124 NPN
2N4125 2N4126 PNP

COMPLEMENTARY SILICON TRANSISTORS

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N4123 series types are complementary silicon small signal transistors manufactured by the epitaxial planar process designed for amplifier and switching applications.

MAXIMUM RATINGS (TA=25°C unless otherwise noted)

	SYMBOL	2N4123	2N4124	2N4125	2N4126	UNIT
Collector-Base Voltage	V _{CB0}	40	30	30	25	V
Collector-Emitter Voltage	V _{CEO}	30	25	30	25	V
Emitter-Base Voltage	V _{EB0}	5.0	5.0	4.0	4.0	V
Collector Current	I _C	200	200	200	200	mA
Power Dissipation	P _D	625	625	625	625	mW
Power Dissipation (T _C =25°C)	P _D	1.5	1.5	1.5	1.5	W
Operating and Storage Junction Temperature	T _J , T _{STG}		-65 TO +150			°C
Thermal Resistance	θ _{JA}		0.2			°C/mW
Thermal Resistance	θ _{JC}		83.3			°C/W

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N4123		2N4124		2N4125		2N4126		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =20V		50		50		50		50	nA
I _{EB0}	V _{EB} =3.0V		50		50		50		50	nA
BV _{CB0}	I _C =10μA	40		30		30		25		V
BV _{CEO}	I _C =1.0mA	30		25		30		25		V
BV _{EB0}	I _E =10μA	5.0		5.0		4.0		4.0		V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		0.3		0.3		0.4		0.4	V
V _{BE(SAT)}	I _C =50mA, I _B =5.0mA		0.95		0.95		0.95		0.95	V
h _{FE}	V _{CE} =1.0V, I _C =2.0mA	50	150	120	360	50	150	120	360	
h _{FE}	V _{CE} =1.0V, I _C =50mA	25		60		25		60		
h _{fe}	V _{CE} =10V, I _C =2.0mA, f=1.0kHz	50	200	120	480	50	200	120	480	
f _T	V _{CE} =20V, I _C =10mA, f=100MHz	250		300		200		250		MHz
C _{ob}	V _{CB} =5.0V, I _E =0, f=100kHz		4.0		4.0		4.5		4.5	pF
C _{ib}	V _{EB} =0.5V, I _C =0, f=100kHz		8.0		8.0		10		10	pF
NF	V _{CE} =5.0V, I _C =100μA, R _S =1.0kΩ, f=10Hz to 15.7kHz		6.0		5.0		5.0		4.0	dB

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