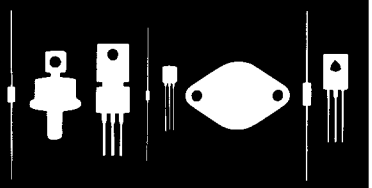
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145 Adams Avenue
Hauppauge, New York 11788



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 (T_A=25°C unless otherwise noted)

	SYMBOL	2N4123	2N4124	2N4125	2N4126	UNIT
Collector-Base Voltage	V_{CBO}	40	30	30	25	V
Collector-Emitter Voltage	V_{CEO}	30	25	30	25	V
Emitter-Base Voltage	V_{EBO}	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 (T_A=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N4123 MIN	2N4123 MAX	2N4124 MIN	2N4124 MAX	2N4125 MIN	2N4125 MAX	2N4126 MIN	2N4126 MAX	UNIT
I_{CBO}	V_{CB}=20V		50		50		50		50	nA
I_{EBO}	V_{EB}=3.0V		50		50		50		50	nA
BV_{CBO}	I_C=10μA	40		30		30		25		V
BV_{CEO}	I_C=1.0mA	30		25		30		25		V
BV_{EBO}	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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