



# 2N4123, 2N4124

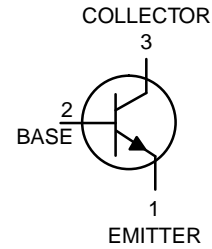
## General Purpose Transistors



ON Semiconductor

- Pb-Free Packages are Available\*

Collector-Emitter Voltage	2N4123 2N4124	$V_{CEO}$	30 25	Vdc
Collector-Base Voltage	2N4123 2N4124	$V_{CBO}$	40 30	Vdc
Emitter-Base Voltage		$V_{EBO}$	5.0	Vdc
Collector Current – Continuous		$I_C$	200	mAdc
Total Device Dissipation @ $T_A = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$		$P_D$	625 5.0	mW mW/ $^\circ\text{C}$
Total Device Dissipation @ $T_C = 25^\circ\text{C}$ Derate above $25^\circ\text{C}$		$P_D$	1.5 12	W mW/ $^\circ\text{C}$
Operating and Storage Junction Temperature Range		$T_J, T_{stg}$	-55 to +150	$^\circ\text{C}$



Thermal Resistance, Junction-to-Ambient	$R_{\theta JA}$	200	$^\circ\text{C/W}$
Thermal Resistance, Junction-to-Case	$R_{\theta JC}$	83.3	$^\circ\text{C/W}$

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

x = 3 or 4

\*For additional information on our Pb-Free strategy and soldering details, please download the ON Semiconductor Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

(T<sub>A</sub> = 25°C unless otherwise noted)

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Collector–Emitter Breakdown Voltage (Note 1) (I <sub>C</sub> = 1.0 mA <sub>dc</sub> , I <sub>E</sub> = 0)	2N4123	V <sub>(BR)CEO</sub>	30	–	V <sub>dc</sub>
	2N4124		25	–	
Collector–Base Breakdown Voltage (I <sub>C</sub> = 10 μA <sub>dc</sub> , I <sub>E</sub> = 0)	2N4123	V <sub>(BR)CBO</sub>	40	–	V <sub>dc</sub>
	2N4124		30	–	
Emitter–Base Breakdown Voltage (I <sub>E</sub> = 10 μA <sub>dc</sub> , I <sub>C</sub> = 0)		V <sub>(BR)EBO</sub>	5.0	–	V <sub>dc</sub>
Collector Cutoff Current (V <sub>CB</sub> = 20 V <sub>dc</sub> , I <sub>E</sub>					



300

200

100

70

50

$I_C$ , COLLECTOR CURRENT (mA)

$I_C$ , COLLECTOR CURRENT (mA)



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CASE 29-11  
ISSUE AM

NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: INCH.
3. CONTOUR OF PACKAGE BEYOND DIMENSION R IS UNCONTROLLED.
4. LEAD DIMENSION IS UNCONTROLLED IN P AND BEYOND DIMENSION K MINIMUM.

