

NPN SILICON TRANSISTOR

Qualified per MIL-PRF-19500/366

Devices

2N3498	2N3499	2N3500	2N3501
2N3498L	2N3499L	2N3500L	2N3501L

Qualified Level

JAN
JANTX
JANTXV
JANS

MAXIMUM RATINGS

Ratings	Symbol	2N3498* 2N3499*	2N3500* 2N3501*	Unit
Collector-Emitter Voltage	V_{CE0}	100	150	Vdc
Collector-Base Voltage	V_{CBO}	100	150	Vdc
Emitter-Base Voltage	V_{EBO}	6.0	6.0	Vdc
Collector Current	I_C	500	300	mAdc
Total Power Dissipation	P_T	1.0 5.0		W
		@ $T_A = 25^{\circ}C$ ⁽¹⁾ @ $T_C = 25^{\circ}C$ ⁽²⁾		
Operating & Storage Junction Temp. Range	T_J, T_{stg}	-55 to +200		$^{\circ}C$

THERMAL CHARACTERISTICS

Characteristics	Symbol	Max.	Unit
Thermal Resistance: Junction-to-Case	$R_{\theta JC}$	35	$^{\circ}C/W$
Junction-to-Ambient	$R_{\theta JA}$	175	

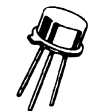
*Electrical characteristics for "L" suffix devices are identical to the "non L" corresponding devices

1) Derate linearly 5.71 W/ $^{\circ}C$ for $T_A > 25^{\circ}C$

2) Derate linearly 28.6 W/ $^{\circ}C$ for $T_C > 25^{\circ}C$



TO-5*
2N3498L, 2N3499L
2N3500L, 2N3501L



TO-39* (TO-205AD)
2N3498, 2N3499
2N3500, 2N3501

*See appendix A for package outline

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}C$ unless otherwise noted)

Characteristics	Symbol	Min.	Max.	Unit
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OFF CHARACTERISTICS

Collector-Emitter Breakdown Voltage $I_C = 10$ mAdc	2N3498, 2N3499 2N3500, 2N3501	$V_{(BR)CE0}$	100 150	Vdc
Collector-Base Cutoff Current $V_{CB} = 50$ Vdc $V_{CB} = 75$ Vdc $V_{CB} = 100$ Vdc $V_{CB} = 150$ Vdc	2N3498, 2N3499 2N3500, 2N3501 2N3498, 2N3499 2N3500, 2N3501	I_{CBO}	50 50 10 10	η Adc η Adc μ Adc μ Adc
Emitter-Base Cutoff Current $V_{EB} = 4.0$ Vdc $V_{EB} = 6.0$ Vdc		I_{EBO}	25 10	η Adc μ Adc

