

# 2N6246-2N6248

## NPN SILICON HIGH POWER TRANSISTORS

### FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

### MAXIMUM RATINGS

Ratings	Symbol	2N6246	2N6247	2N6248	Unit
Collector-Emitter Voltage	$V_{CE0}$	-60	-80	-100	Vdc
Collector-Base Voltage	$V_{CBO}$	-70	-90	-110	Vdc
Emitter-Base Voltage	-5	5.0			Vdc
Collector Current	$I_C$	-15			Adc
Base Current	$I_B$	-5.0			Adc
Total Power Dissipation $T_A = 25^\circ\text{C}$	$P_T$	125			W
Junction Temperature	$T_J$	150			$^\circ\text{C}$
Storage Junction Temperature Range	$T_{stg}$	-65 to +200			$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	1.4			$^\circ\text{C/W}$

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

Characteristics	Symbol	Min.	Max.	Unit
<b>OFF CHARACTERISTICS</b>				
<b>Collector-Emitter Sustaining Voltage</b> $I_C = 20\text{mA}$ , $I_B = 0$	2N6246 2N6247 2N6248	$V_{CE0(sus)}$	-60 -80 -100	Vdc
<b>Collector-Emitter Saturation Voltage</b> $I_C = -7\text{Adc}$ , $I_B = -0.7\text{Adc}$ $I_C = -6\text{Adc}$ , $I_B = -0.6\text{Adc}$ $I_C = -5\text{Adc}$ , $I_B = -0.5\text{Adc}$	2N6246 2N6247 2N6248	$V_{CE(sat)}$	- - -	Vdc
<b>Collector-Emitter Saturation Voltage</b> $I_C = -15\text{Adc}$ , $I_B = -0.3\text{Adc}$ $I_C = -15\text{dc}$ , $I_B = -0.4\text{Adc}$ $I_C = -10\text{Adc}$ , $I_B = -0.2\text{Adc}$	2N6246 2N6247 2N6248	$V_{CE(sat)}$	- - -	Vdc
<b>Base-Emitter On-Voltage</b> $I_C = -7\text{Adc}$ , $I_B = -4\text{Vdc}$ $I_C = -6\text{Adc}$ , $I_B = -4\text{Vdc}$ $I_C = -5\text{Adc}$ , $I_B = -4\text{Vdc}$	2N6246 2N6247 2N6248	$V_{BE(SAT)}$	- - -	Vdc
<b>Collector Cutoff Current</b> $V_{CE} = \frac{1}{2}$ Rated $V_{CE0}$ , $I_B = 0$		$I_{CEO}$	-	mA
<b>Collector Cutoff Current</b> $V_{CE} = -65\text{V}$ , $V_{BE} = 1.5\text{V}$  $V_{CE} = -55\text{V}$ , $V_{BE} = -1.5\text{V}$ , $T_C = 150^\circ\text{C}$	2N6246 2N6247 2N6248 2N6246 2N6247 2N6248	$I_{CEX}$	- - - - - -	Vdc

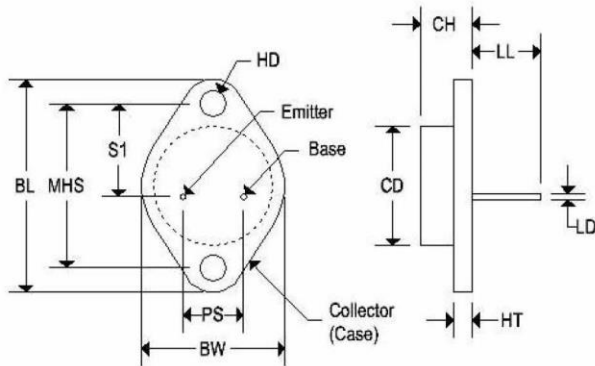
# 2N6246-2N6248

## NPN SILICON HIGH POWER TRANSISTORS

Characteristics		Symbol	Min.	Max.	Unit
<b>ON CHARACTERISTICS</b>					
<b>Emitter Cutoff Current</b> $V_{EB} = -5V, I_C = 0$	2N6246	$I_{CEO}$	-	-5.0	mA <sub>dc</sub>
	2N6247		-	-1.0	
	2N6248		-	-1.0	
<b>DC Current Gain</b> $I_C = -7A_{dc}, V_{CE} = -4.0 V_{dc}$ $I_C = -6A_{dc}, V_{CE} = -4.0 V_{dc}$ $I_C = -5A_{dc}, V_{CE} = -4.0 V_{dc}$ $I_C = -15A_{dc}, V_{CE} = -4.0 V_{dc}$ $I_C = -15A_{dc}, V_{CE} = -4.0 V_{dc}$ $I_C = -10A_{dc}, V_{CE} = -4.0 V_{dc}$	2N6246	$h_{FE}$	20	100	-
	2N6247		20	100	
	2N6248		20	100	
	2N6246		5	-	
	2N6247		5	-	
	2N6248		5	-	

### MECHANICAL CHARACTERISTICS

<b>Case</b>	TO-3
<b>Marking</b>	Alpha-numeric
<b>Polarity</b>	See below



	TO-3			
	Inches		Millimeters	
	Min	Max	Min	Max
CD	-	0.875	-	22.220
CH	0.250	0.380	6.860	9.650
HT	0.060	0.135	1.520	3.430
BW	-	1.050	-	26.670
HD	0.131	0.188	3.330	4.780
LD	0.038	0.043	0.970	1.090
LL	0.312	0.500	7.920	12.700
BL	1.550 REF		39.370 REF	
MHS	1.177	1.197	29.900	30.400
PS	0.420	0.440	10.670	11.180
S1	0.655	0.675	16.640	17.150