DIGITRON Semiconductors

High-reliability discrete products
and engineering services since 1977

2N6372-2N6374

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	2N6372	2N6373	2N6374	Unit
Collector-Emitter Voltage	V_{CEO}	80	60	40	Vdc
Collector-Base Voltage	V_{CBO}	90	70	50	Vdc
Emitter-Base Voltage	V_{EBO}	6.0			Vdc
Collector Current	I_C	6.0			Adc
Total Power Dissipation $T_C = 25°C$	P_D	40			W
Junction Temperature	T_J	150			°C
Storage Junction Temperature Range	T_{stg}	-65 to +200			°C
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	4.3			°C/W

ELECTRICAL CHARACTERSITICS ($T_A = 25°C$ unless otherwise specified)

Characteristics		Symbol	Min.	Max.	Unit
OFF CHARACTERISTICS					
Collector-Emitter Sustaining Voltage $I_C = 0.1A, I_B = 0$	2N6372 2N6373 2N6374	$V_{CEO(sus)}$	80 60 40	- - -	Vdc
Collector-Emitter Saturation Voltage $I_C = 2Adc, I_B = 0.2$ Adc $I_C = 6Adc, I_B = 0.6$ Adc		$V_{CE(sat)}$	- -	0.7 1.2	Vdc
Base Emitter Saturation Voltage $I_C = 2Adc, I_B = 0.2$ Adc $I_C = 6Adc, I_B = 0.6$ Adc		$V_{BE(sat)}$	- -	1.2 2.0	Vdc
Collector Cutoff Current $V_{CE} = 80Vdc, I_B = 0$ $V_{CE} = 60Vdc, I_B = 0$ $V_{CE} = 40Vdc, I_B = 0$	 2N6372 2N6373 2N6374	I_{CEO}	 - - -	 0.1 0.1 0.1	mAdc
Collector Cutoff Current V_{CE} = Rated $V_{CB}, I_E = 0$		I_{CBO}	-	10	µAdc
Emitter Cutoff Current $V_{EB} = 6Vdc, I_C = 0$		I_{EBO}	-	0.1	mAdc
DC Current Gain $I_C = 2.0Adc, V_{CE} = 2.0$ Vdc $I_C = 2.5Adc, V_{CE} = 2.0$ Vdc $I_C = 3.0Adc, V_{CE} = 2.0$ Vdc	 2N6372 2N6373 2N6374	h_{FE}	 - 20 -	 - 100 -	-
Transition Frequency $I_C = 0.5Adc, V_{CE} = 10Vdc, f = 1MHz$		f_T	4 (typ.)		MHz

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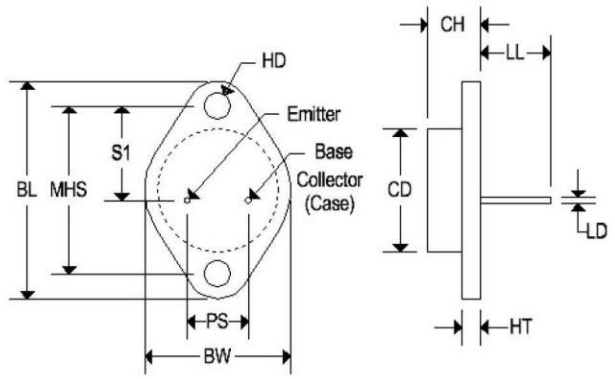
Characteristics		Symbol	Min.	Max.	Unit
DC Current Gain					
I_C = -2Adc, V_{CE} = -4.0 Vdc	2N6372		-	-	
I_C = -2.5Adc, V_{CE} = -4.0 Vdc	2N6373	h_{FE}	20	100	-
I_C = -3Adc, V_{CE} = -4.0 Vdc	2N6374		-	-	
I_C = -6Adc, V_{CE} = -4.0 Vdc	All devices		5	-	
Transition Frequency		f_T			MHz
I_C = 1Adc, V_{CE} = -4Vdc, f = 1MHz			5	-	

MECHANICAL CHARACTERISTICS

Case	TO-66
Marking	Alpha-numeric
Polarity	See below



Dim	TO-66			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	1.205	1.280	30.60	32.50
CD	0.445	0.557	11.303	14.148
CH	0.257	0.284	6.540	7.220
LL	0.374	0.413	9.500	10.50
BW	0.680	0.727	17.26	18.46
LD	0.030	0.036	0.760	0.920
HT	0.054	0.065	1.380	1.650
MHS	0.951	0.976	24.16	24.78
S1	0.545	0.614	13.84	15.60
HD	0.131	0.154	3.320	3.920
PS	0.191	0.210	4.860	5.340