

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	2N5671	2N5672	Units
Collector-Base Voltage	V_{CBO}	120	150	Vdc
Collector-Emitter Voltage	V_{CEO}	90	120	Vdc
Emitter-Base Voltage	V_{EBO}	7.0		Vdc
Base Current	I_B	10		Adc
Collector Current	I_C	30		Adc
Total Power Dissipation @ $T_C = 25^\circ\text{C}$ ⁽¹⁾	P_T	140		W
Operating & Storage Junction Temperature Range	T_J, T_{stg}	-65 to +200		$^\circ\text{C}$
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	1.25		$^\circ\text{C}/\text{W}$

Note 1: Derate linearly 800mW/ $^\circ\text{C}$ for $T_C > 25^\circ\text{C}$

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

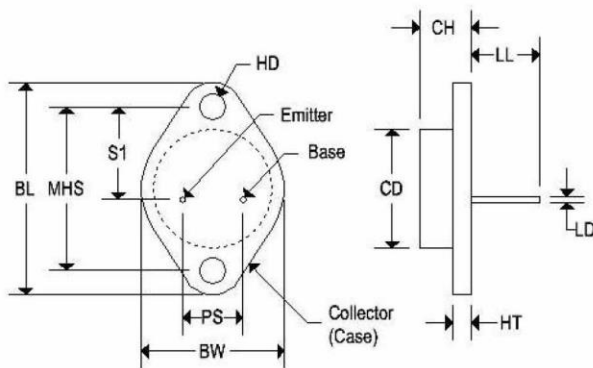
Characteristics	Symbol	Min.	Max.	Unit
Collector-Emitter Sustaining Voltage ($I_C = 200\text{mA}, I_B = 0$)	2N5671	90	-	V
	2N5672	120	-	
Collector-Emitter Saturation Voltage ($I_C = 15.0\text{A}, I_B = 1.2\text{A}$)	$V_{CE(sat)}$	-	0.75	Vdc
Base-Emitter Saturation Voltage ($I_C = 15.0\text{A}, I_B = 1.2\text{A}$)	$V_{BE(sat)}$	-	1.5	Vdc
Collector Cutoff Current ($V_{CE} = 80\text{V}, I_B = 0$)	$I_{(CEO)}$	-	10	mA
Collector Cutoff Current ($V_{CE} = 2\text{V}, I_C = 15\text{A}$) ($V_{CE} = 5\text{V}, I_C = 20\text{A}$)	h_{FE}	20	100	-
		20	-	
Emitter Cutoff Current ($V_{EB} = 7.0\text{V}, I_C = 0$)	I_{EBO}	-	10	mA
DC Current Gain ($I_C = 0.5\text{A}, V_{CE} = 5.0\text{V}$) ($I_C = 2.0\text{A}, V_{CE} = 5.0\text{V}$) ($I_C = 12\text{A}, V_{CE} = 5.0\text{V}$) ($I_C = 10\text{A}, V_{CE} = 5.0\text{V}$)	2N5671	50	-	-
	2N5672	30	-	
	2N5671	50	200	
	2N5672	30	150	
	2N5671	15	-	
	2N5672	15	-	
Transition Frequency ($I_C = 2.0\text{A}, V_{CE} = 10\text{V}, f = 1.0\text{MHz}$)	f_T	40	-	MHz
SWITCHING CHARACTERISTICS				
Turn-On Time $V_{CC} = 30\text{V}, I_C = 15\text{A}, I_{B1} = -I_{B2} = 1.2\text{A}, t_p = 0.1\text{ms}$	t_{on}	-	0.5	μs
Storage Time $V_{CC} = 30\text{V}, I_C = 15\text{A}, I_{B1} = -I_{B2} = 1.2\text{A}, t_p = 0.1\text{ms}$	t_s	-	1.5	μs
Fall Time $V_{CC} = 30\text{V}, I_C = 15\text{A}, I_{B1} = -I_{B2} = 1.2\text{A}, t_p = 0.1\text{ms}$	t_f	-	0.5	μs

2N5671, 2N5672

NPN HIGH POWER SILICON TRANSISTORS

MECHANICAL CHARACTERISTICS

Case:	TO-3
Marking:	Alpha-Numeric
Polarity:	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