NPN 2N3054

SILICON POWER TRANSISTORS

The 2N3054 are NPN transistors mounted in TO-66 metal package with the collector connected to the case .
They Designed for general purpose switching and amplifier applications.
Compliance to RoHS.

ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
V_{CEO}	Collector-Emitter Voltage (I_B = 0)		55	V
V_{CBO}	Collector-Base Voltage (I_E = 0)		90	V
V_{EBO}	Emitter-Base Voltage (I_C = 0)		7	V
I_C	Collector Current		4	A
I_{CM}	Peak Collector Current		10	
I_B	Base Current		2	A
P_D	Total Power Dissipation	@ T_{case}= 25°	25	W
T_J	Junction Temperature		200	°C
T_{Stg}	Storage Temperature range		-65 to +200	°C

THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
R_{thJ-c}	Thermal Resistance, Junction-case	7	°C/ W

ELECTRICAL CHARACTERISTICS

TC=25°C unless otherwise noted

Symbol	Ratings	Test Condition(s)		Min	Typ	Max	Unit
I_{CEO}	Collector Cut-Off Current	V_{CE}= 30 V, I_B= 0		-	-	0.5	mA
I_{EBO}	Emitter Cut-Off Current	V_{EB} = 7V, I_C = 0		-	-	1	
I_{CEV}	Collector Cut-Off Current	V_{CE} = 90V V_{BE} = 1.5V	T_C = 25°C	-	-	1	
			T_C = 150°C	-	-	6	
V_{CEO} (*)	Collector Emitter Breakdown Voltage	I_C=0.1 mA, I_B=0		55	-	-	V
h_{FE} (*)	DC Current Gain	I_C= 100 mA, V_{CE}= 10 V		40	-	-	-
		I_C= 1 A, V_{CE}= 2 V		8	-	80	
$V_{CE(SAT)}$ (*)	Collector-Emitter saturation Voltage	I_C= 500 mA, I_B= 50 mA		-	-	1	V
		I_C= 3 A, I_B= 1 A		-	-	6	
V_{BE}	Base-Emitter Voltage	I_C= 500 mA, V_{CE}= 4 V		-	-	1.7	V
f_T	Transition Frequency	I_C= 200 mA, V_{CE}=10 V f= 1 MHz		500	-	-	MHz

(*) Pulse conditions : tp < 300 μs, δ =2%.

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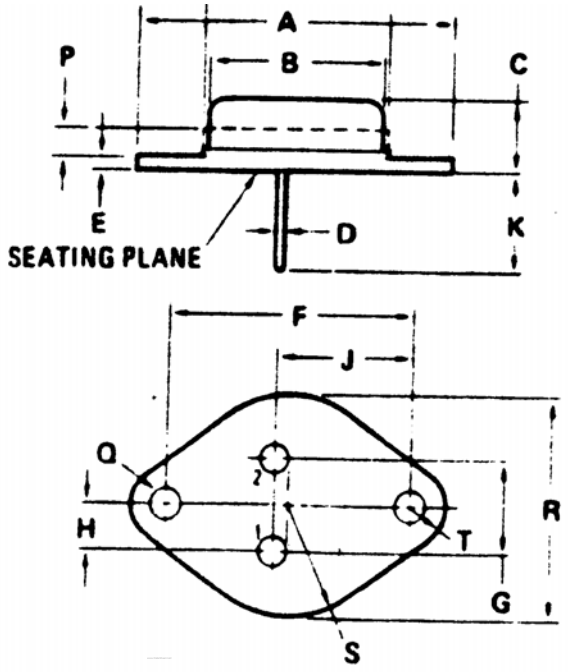
MECHANICAL DATA CASE TO-66

DIMENSIONS		
	mm	
	min	max
A	30.60	32.52
B	11.94	12.7
C	6.35	8.63
D	0.712	0.863
E	1.27	1.91
F	24.28	24.50
G	4.83	5.33
H	2.41	2.67
J	14.48	14.99
K	9.15	10.50
P	-	2.7
Q	3.60	4.00
S	-	8.89
T	-	3.68



Pin 1 :	Emitter
Pin 2 :	Base
Case :	Collector

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