

## NPN 2N3441

### SILICON POWER TRANSISTOR

The 2N3441 are NPN transistors mounted in TO-66 metal package with the collector connected to the case .

They are intended for use in general purpose switching and amplifier applications.

Compliance to RoHS.

#### ABSOLUTE MAXIMUM RATINGS

Symbol	Ratings		Value	Unit
$V_{CEO}$	Collector-Emitter Voltage	$I_B = 0$	140	V
$V_{CBO}$	Collector-Base Voltage	$I_E = 0$	160	V
$V_{EBO}$	Emitter-Base Voltage	$I_C = 0$	7	V
$I_C$	Collector Current		3	A
$I_B$	Base Current		2	A
$P_t$	Total Power Dissipation	@ $T_C = 25^\circ$	25	W
$T_J$	Junction Temperature		200	$^\circ\text{C}$
$T_{Stg}$	Storage Temperature		-65 to +200	$^\circ\text{C}$

#### ELECTRICAL CHARACTERISTICS

$T_C=25^\circ\text{C}$  unless otherwise noted

Symbol	Ratings	Test Condition(s)	Min	Typ	Max	Unit
$V_{CEO(SUS)}$	Collector-Emitter Sustaining Voltage (*)	$I_C = 100 \text{ mA} , I_B = 0 \text{ A}$	140	-	-	V
$I_{CEO}$	Collector Cutoff Current	$V_{CE} = 140 \text{ V} , I_B = 0$	-	-	10	mA
$I_{CEX}$	Collector Cutoff Current	$V_{CE} = 140 \text{ V} , V_{BE} = 1.5 \text{ V}$	-	-	5	mA
		$V_{CE} = 140 \text{ V} , V_{BE} = 1.5 \text{ V}$ $T_{case} = 150^\circ\text{C}$	-	-	6	
$I_{EBO}$	Emitter Cutoff Current	$V_{EB} = 7 \text{ V} , I_C = 0 \text{ A}$	-	-	1	mA
$V_{CE(SAT)}$	Collector-Emitter saturation Voltage (*)	$I_C = 2.7 \text{ A} , I_B = 900 \text{ mA}$	-	-	6	V
$V_{BE(on)}$	Base-Emitter on Voltage (*)	$I_C = 40 \text{ A} , I_B = 4 \text{ A}$	-	-	6.5	V
$h_{FE}$	DC Current Gain	$I_C = 500 \text{ mA} , V_{CE} = 4 \text{ V}$	25	-	100	-
		$I_C = 2.7 \text{ A} , V_{CE} = 4 \text{ V}$	5	-	-	

(\*) Pulse Duration = 300  $\mu\text{s}$ , Duty Cycle  $\leq 1.5\%$

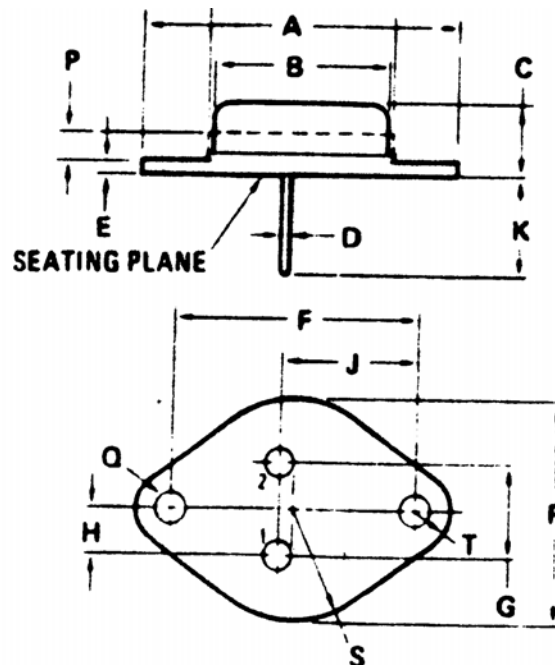
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### THERMAL CHARACTERISTICS

Symbol	Ratings	Value	Unit
$R_{thJC}$	Thermal Resistance, Junction to Case	7	°C/W

### 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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