



## 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  $\leq 1.5\%$

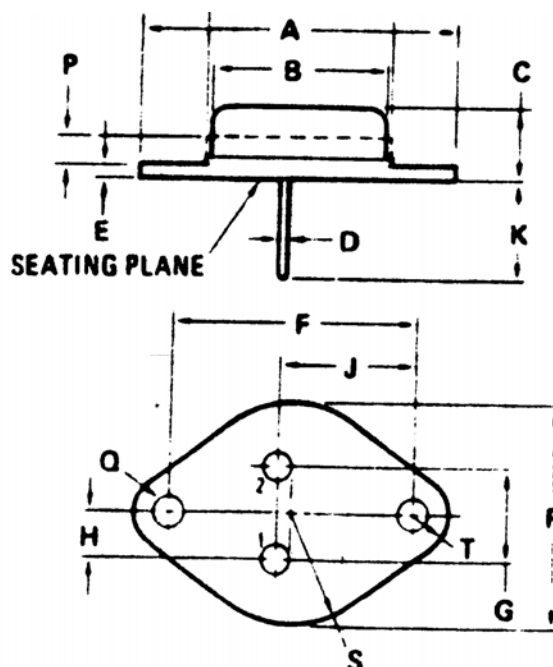
## NPN 2N3441

### 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

Revised August 2012

Information furnished is believed to be accurate and reliable. However, Comset Semiconductors assumes no responsibility for the consequences of use of such information nor for any infringement of patents or other rights of third parties which may result from its use. Data are subject to change without notice. Comset Semiconductors makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Comset Semiconductors assume any liability arising out of the application or use of any product and specifically disclaims any and all liability, including without limitation consequential or incidental damages. Comset Semiconductors' products are not authorized for use as critical components in life support devices or systems.