

isc Silicon NPN Power Transistor

2N4240

DESCRIPTION

- Excellent Safe Operating Area
- Low Collector-Emitter Saturation Voltage
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

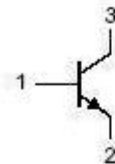
- Designed for switching regulator applications where high frequency and high voltage swings and required

ABSOLUTE MAXIMUM RATINGS($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	500	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	2	A
P_C	Collector Power Dissipation@ $T_C=25^\circ\text{C}$	35	W
T_J	Junction Temperature	-65~200	$^\circ\text{C}$
T_{stg}	Storage Temperature	-65~200	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	5.0	$^\circ\text{C/W}$

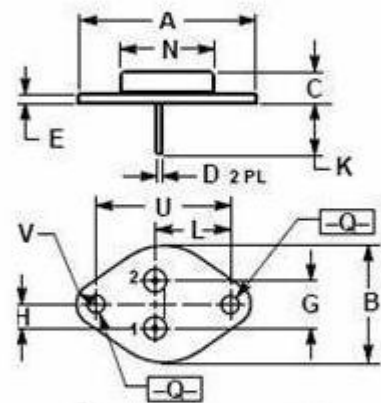


PIN 1. BASE

2. EMITTER

3. COLLECTOR (CASE)

TO-66 package



DIM	mm	
	MIN	MAX
A	31.40	31.80
B	17.30	17.90
C	6.70	7.10
D	0.70	0.90
E	1.40	1.80
G	5.08	
H	2.54	
K	9.80	10.50
L	14.70	14.90
N	12.40	12.70
Q	3.60	3.80
U	24.30	24.50
V	3.50	3.70

isc Silicon NPN Power Transistor**2N4240****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEO(SUS)} *	Collector-Emitter Sustaining Voltage	I _C =200mA; I _B = 0	300		V
I _{CEO}	Collector Cutoff Current	V _{CE} =150V; I _B = 0		0.5	mA
I _{CEX}	Collector-Emitter Leakage current	V _{CE} =450V, V _{BE(OFF)} =1.5V		2.0	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 6V; I _C = 0		0.5	mA
V _{CE(sat)} *	Collector-Emitter Saturation Voltage	I _C = 0.75A; I _B = 75mA		1.0	V
V _{BE(sat)} *	Base-Emitter Saturation Voltage	I _C = 0.75A; I _B = 75mA		1.8	V
V _{BE(ON)} *	Base-Emitter On Voltage	I _C =0.1A; V _{CE} = 10V		1.4	V
h _{FE-1} *	DC Current Gain	I _C = 0.1A; V _{CE} = 10V	40		
h _{FE-2} *	DC Current Gain	I _C = 0.75A; V _{CE} = 2V	10	100	
h _{FE-3} *	DC Current Gain	I _C = 0.75A; V _{CE} = 10V	30	150	

*:Pulse test:Pulse width=300us,duty cycle≤2%

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