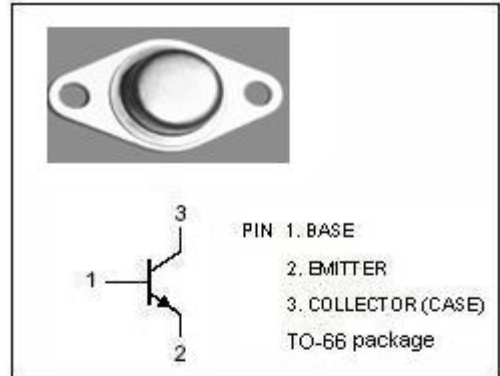


**isc Silicon NPN Power Transistor**
**2N4240**
**DESCRIPTION**

- 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**

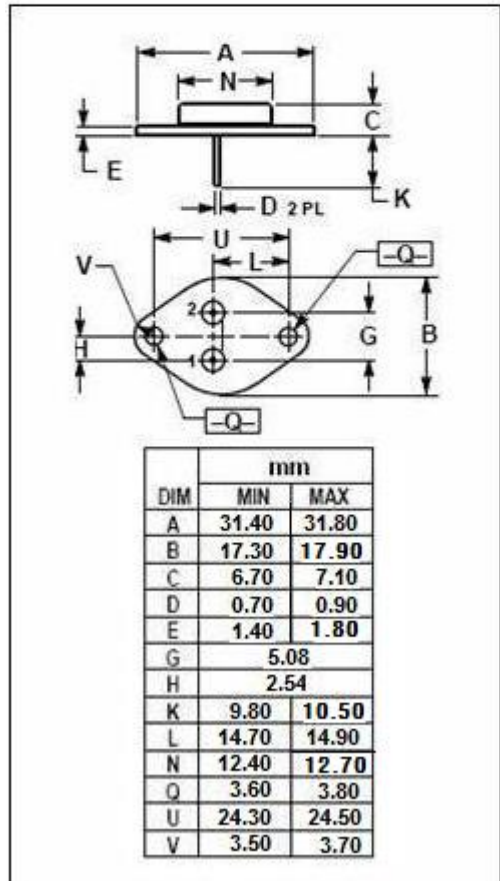
- Designed for switching regulator applications where high frequency and high voltage swings and required


**ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>CBO</sub>	Collector-Base Voltage	500	V
V <sub>CEO</sub>	Collector-Emitter Voltage	300	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current-Continuous	2	A
P <sub>C</sub>	Collector Power Dissipation@T <sub>C</sub> =25°C	35	W
T <sub>J</sub>	Junction Temperature	-65~200	°C
T <sub>stg</sub>	Storage Temperature	-65~200	°C

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5.0	°C/W



**isc Silicon NPN Power Transistor****2N4240****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$  unless otherwise specified

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

\*:Pulse test:Pulse width=300us,duty cycle $\leq$ 2%

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