

isc Silicon NPN Power Transistor

2SC4129

DESCRIPTION

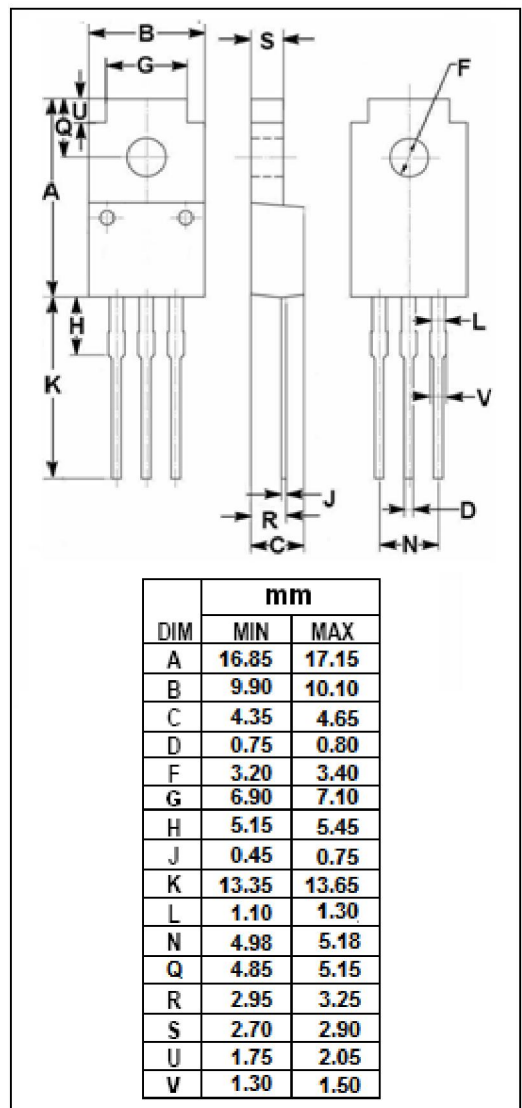
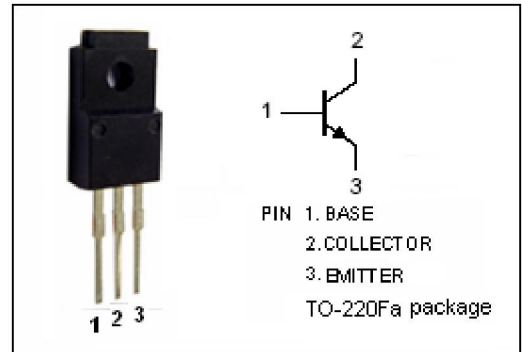
- Collector-Emitter Breakdown Voltage-  
:  $V_{(BR)CEO} = 400V(\text{Min})$
- High Switching Speed
- Wide Area of Safe Operation

APPLICATIONS

- Designed for switching regulator and general purpose applications.

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	400	V
$V_{CEO}$	Collector-Emitter Voltage	400	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current-Continuous	5	A
$I_{CM}$	Collector Current-Peak	7	A
$P_C$	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	30	
$T_J$	Junction Temperature	150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature	-55~150	$^\circ\text{C}$



**isc Silicon NPN Power Transistor****2SC4129****ELECTRICAL CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)CEO</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> = 1mA; I <sub>B</sub> = 0	400			V
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage	I <sub>C</sub> = 50 μ A; I <sub>E</sub> = 0	400			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage	I <sub>E</sub> = 50 μ A; I <sub>C</sub> = 0	7			V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1A			1.0	V
V <sub>BE(sat)</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = 5A; I <sub>B</sub> = 1A			1.5	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = 400V; I <sub>E</sub> = 0			10	μ A
I <sub>EBO</sub>	Emitter Cutoff Current	V <sub>EB</sub> = 5V; I <sub>C</sub> = 0			10	μ A
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = 3A; V <sub>CE</sub> = 5V	16		50	
C <sub>OB</sub>	Output Capacitance	I <sub>E</sub> = 0; V <sub>CB</sub> = 10V; f= 1MHz		80		pF
f <sub>T</sub>	Current-Gain—Bandwidth Product	I <sub>E</sub> = -0.5A; V <sub>CE</sub> = 10V		15		MHz