

isc Silicon NPN Power Transistor

2SC2027

DESCRIPTION

- With TO-3 Package
- Low collector saturation voltage
- Minimum Lot-to-Lot variations for robust device performance and reliable operation.

APPLICATIONS

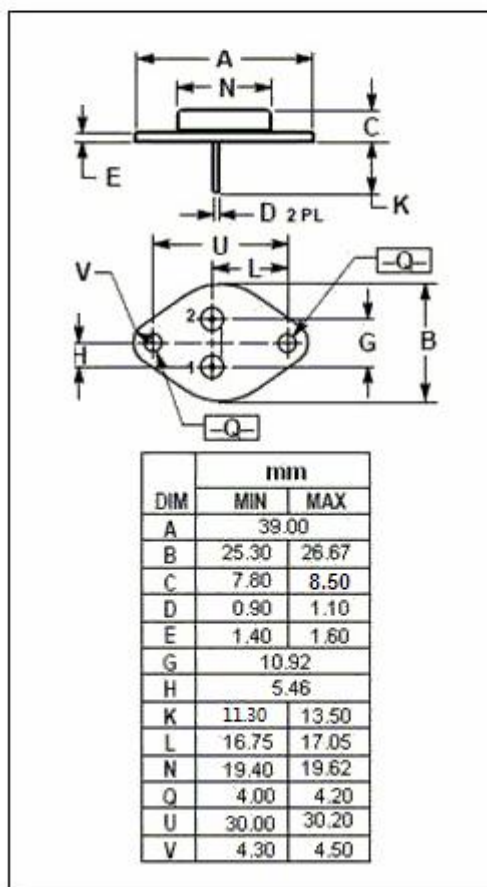
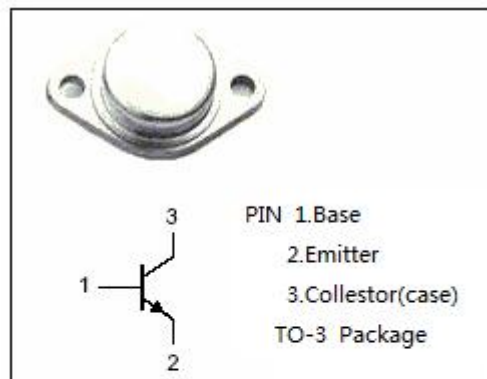
- Designed for color TV horizontal deflection driver

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	1500	V
V_{CEO}	Collector-Emitter Voltage	800	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	5	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	50	W
T_J	Junction Temperature	175	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-65-200	$^{\circ}\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	3.5	$^{\circ}\text{C/W}$



isc Silicon NPN Power Transistor**2SC2027****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = 4A; I _B = 1.3A		5.0	V
V _{BE(sat)}	Base-Emitter Saturation Voltage	I _C = 4A; I _B = 1.3A		1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} =600V; I _B = 0		10	uA
I _{EBO}	Emitter Cutoff Current	V _{EB} = 10V; I _C =0		10	uA
h _{FE-1}	DC Current Gain	I _C = 1A ; V _{CE} = 5V	8	36	
h _{FE-2}	DC Current Gain	I _C = 4.5A ; V _{CE} = 5V	2.25		

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