

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

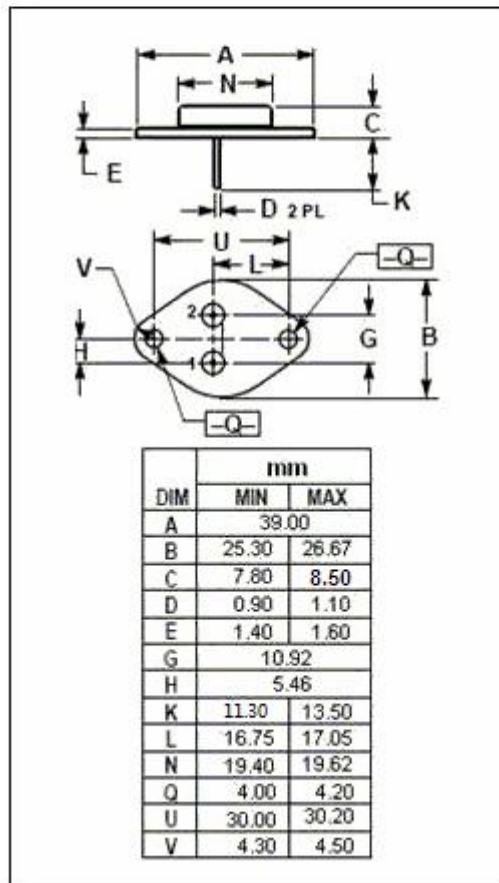
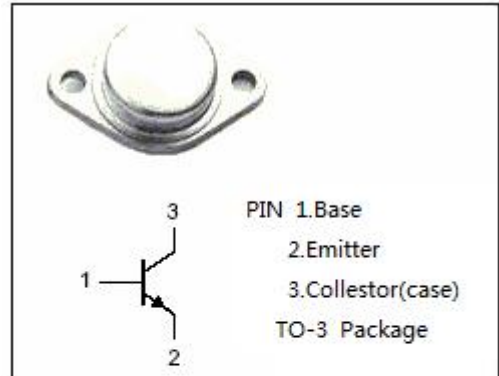
- Designed for color TV horizontal deflection driver

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CB0}	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°C	50	W
T _J	Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-65-200	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	3.5	°C/W



isc Silicon NPN Power Transistor**2SC2027****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ 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	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 10V; I_C=0$		10	μA
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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