

isc Silicon NPN Power Transistor

2SC1413A

DESCRIPTION

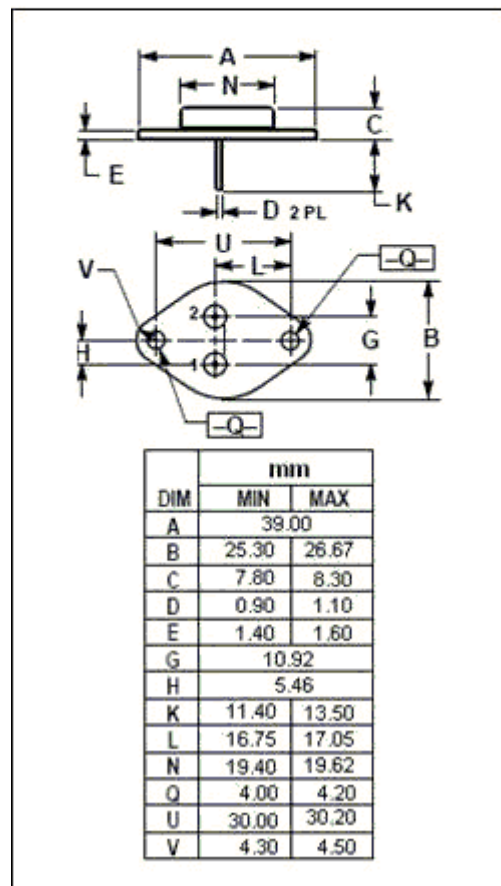
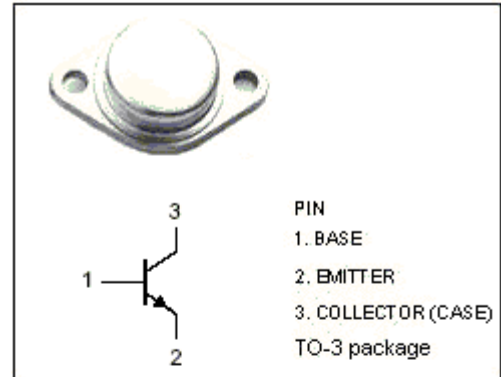
- High Collector-base breakdown voltage:1500V
- Low saturation voltage@5A
- Large area of safe operation

APPLICATIONS

- Designed for the horizontal output stage in power-transformer-less television receivers.

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{CBO}	Collector-Base Voltage	1500	V
V _{CEO}	Collector-Emitter Voltage	500	V
V _{EBO}	Emitter-Base Voltage	6	V
I _C	Collector Current-Continuous	5	A
P _C	Collector Power Dissipation @ T _C =25°C	50	W
	Collector Power Dissipation @ T _a =25°C	20	
T _J	Junction Temperature	230	°C
T _{stg}	Storage Temperature Range	-45~150	°C



isc Silicon NPN Power Transistor**2SC1413A****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 10\text{mA}$; $I_E= 0$	500			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 10\text{mA}$; $I_C= 0$	6			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 1.2\text{A}$			10	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 1.2\text{A}$			2	V
I_{CBX}	Collector Cutoff Current	$V_{CB}= 1500\text{V}$; $V_{EB}= 1.5\text{V}$			1	mA