

isc Silicon NPN Power Transistor
2SC1403
DESCRIPTION

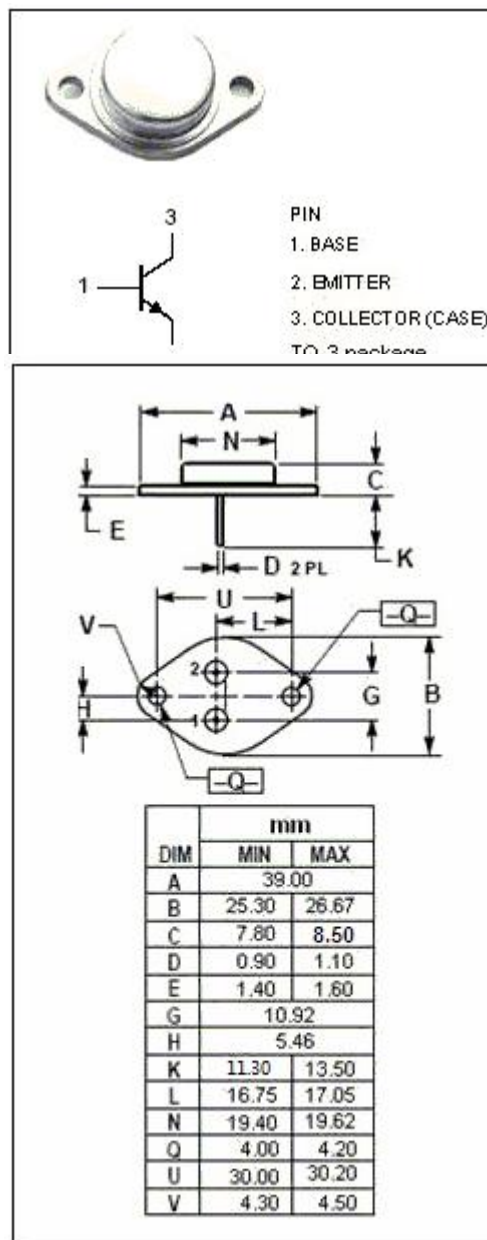
- Wide area of safe operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For audio frequency power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	160	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	8	A
P_C	Collector Power Dissipation @ $T_C=25^{\circ}\text{C}$	70	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-50~150	$^{\circ}\text{C}$



isc Silicon NPN Power Transistor**2SC1403****ELECTRICAL CHARACTERISTICS** $T_C=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector- Emitter Breakdown Voltage	$I_C= 50\text{mA}$; $I_E= 0$	100			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 1\text{mA}$; $I_C= 0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 0.5\text{A}$			2	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C= 5\text{A}$; $I_B= 0.5\text{A}$			2.5	V
I_{CBO}	Collector cut-off current	$V_{CB}=160\text{V}$; $I_E=0$			0.1	mA
I_{EBO}	Emitter cut-off current	$V_{EB}=5\text{V}$; $I_C=0$			0.1	mA
h_{FE}	DC current gain	$I_C=3\text{A}$; $V_{CE}=4\text{V}$	30			
f_T	Transition frequency	$I_C=0.5\text{A}$; $V_{CE}=10\text{V}$		10		MHz

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