

isc Silicon NPN Power Transistor

2SC4278

DESCRIPTION

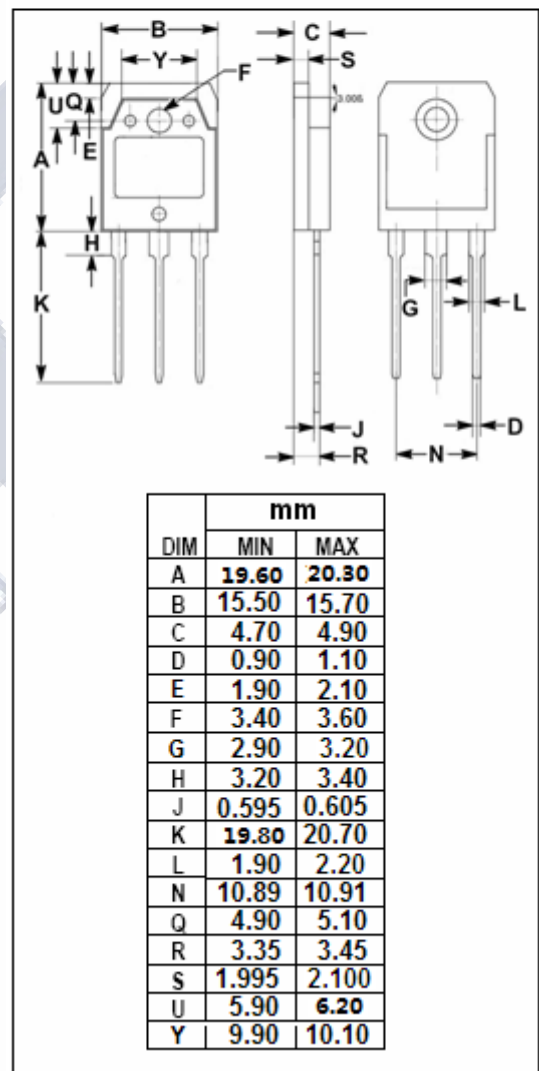
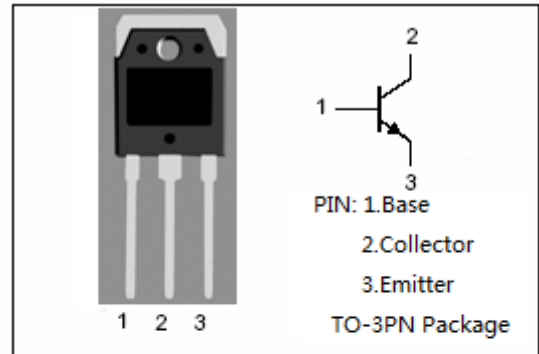
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 150V(\text{Min})$
- High Power Dissipation
- High Current Capacity
- Complement to Type 2SA1633

APPLICATIONS

- For audio and general purpose applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	150	V
V_{CEO}	Collector-Emitter Voltage	150	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current-Continuous	10	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	100	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC4278****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	$I_C= 25\text{mA}; I_B= 0$	150			V
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage	$I_C= 0.1\text{mA}; I_E= 0$	150			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage	$I_E= 0.1\text{mA}; I_C= 0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C= 7\text{A}; I_B= 0.7\text{A}$			1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}= 150\text{V}; I_E= 0$			5	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}= 5\text{V}; I_C= 0$			5	μA
h_{FE}	DC Current Gain	$I_C= 1\text{A}; V_{CE}= 5\text{V}$	60		320	
C_{OB}	Collector Output Capacitance	$I_E= 0; V_{CB}= 10\text{V}; f= 1\text{MHz}$		230		pF
f_T	Current-Gain—Bandwidth Product	$I_E= -1\text{A}; V_{CE}= 5\text{V}$		20		MHz