

isc Silicon NPN Power Transistor

2SC2578

DESCRIPTION

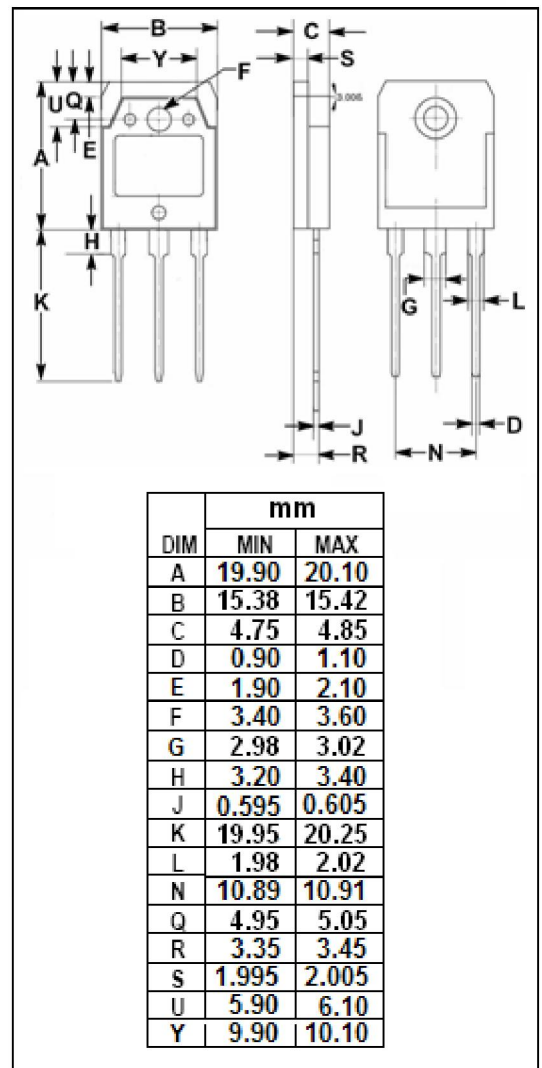
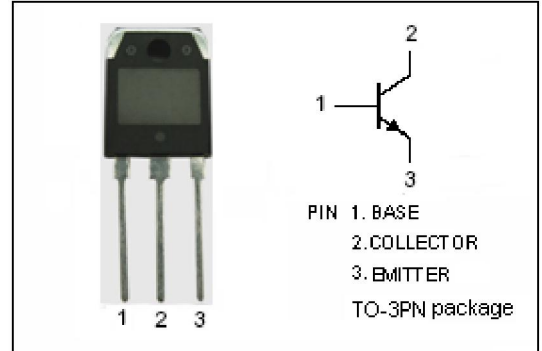
- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = 100V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SA1103

APPLICATIONS

- Designed for audio power amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	140	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current-Continuous	7	A
I_B	Base Current-Continuous	3	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	-55~150	$^\circ\text{C}$



isc Silicon NPN Power Transistor**2SC2578****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	$I_C=50\text{mA}; I_B=0$	100			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=0.3\text{A}$			1.5	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=100\text{V}; I_E=0$			10	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=6\text{V}; I_C=0$			10	μA
h_{FE}	DC Current Gain	$I_C=3\text{A}; V_{CE}=4\text{V}$	50			
f_T	Current-Gain—Bandwidth Product	$I_E=-0.5\text{A}; V_{CE}=12\text{V}$		20		MHz
C_{OB}	Output Capacitance	$I_E=0; V_{CB}=10\text{V}; f=1.0\text{MHz}$		150		pF

◆ **h_{FE} Classifications**

O	P	Y
50-100	70-140	90-180