

isc Silicon PNP Power Transistor

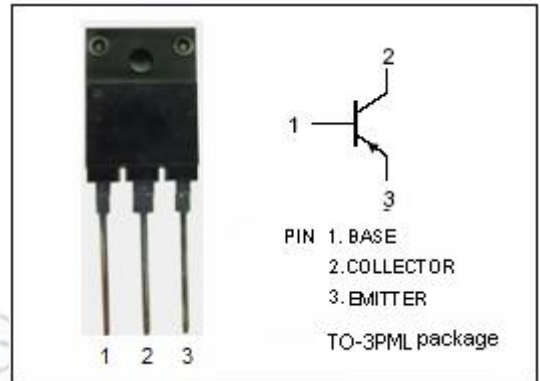
2SA1141

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
 $V_{(BR)CEO} = -115V(\text{Min})$
- Good Linearity of h_{FE}
- Complement to Type 2SC2681
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

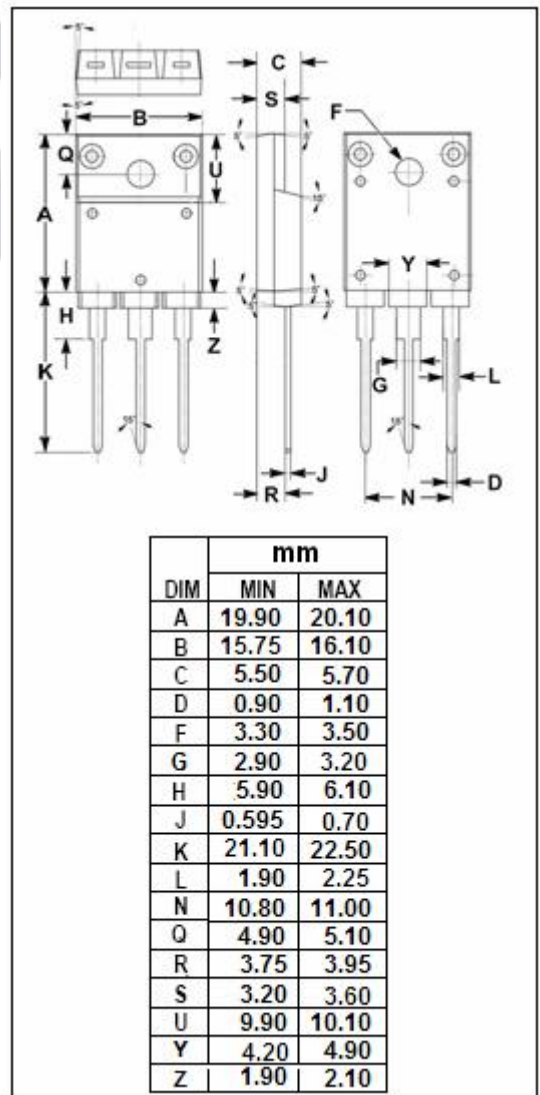
APPLICATIONS

- Audio frequency power amplifier
- High frequency power amplifier



ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-115	V
V_{CEO}	Collector-Emitter Voltage	-115	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-10	A
I_{CM}	Collector Current-Peak	-15	A
P_C	Collector Power Dissipation @ $T_a=25^\circ\text{C}$	2.0	W
	Collector Power Dissipation @ $T_c=25^\circ\text{C}$	100	
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature Range	-55~150	°C



isc Silicon PNP Power Transistor**2SA1141****ELECTRICAL CHARACTERISTICS** $T_c=25^\circ\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4.5\text{A}; I_B = -0.45\text{A}$			-1.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -4.5\text{A}; V_{CE} = -2\text{V}$			-2.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -80\text{V}; I_E = 0$			-50	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -5\text{V}; I_C = 0$			-50	μA
h_{FE-1}	DC Current Gain	$I_C = -1\text{A}; V_{CE} = -2\text{V}$	60		200	
h_{FE-2}	DC Current Gain	$I_C = -4.5\text{A}; V_{CE} = -2\text{V}$	40			
C_{OB}	Output Capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1.0\text{MHz}$		390		pF
f_T	Current-Gain—Bandwidth Product	$I_C = -1\text{A}; V_{CE} = -2\text{V}$		90		MHz

◆ **h_{FE-1} Classifications**

R	Q
60-120	100-200