

INCHANGE Semiconductor

isc Product Specification

isc Silicon PNP Power Transistor

MJE2901T

DESCRIPTION

- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -60V(\text{Min})$
- High DC Current Gain-
: $h_{FE} = 25-100@I_C = -3A$
- Complement to Type MJE2801T

APPLICATIONS

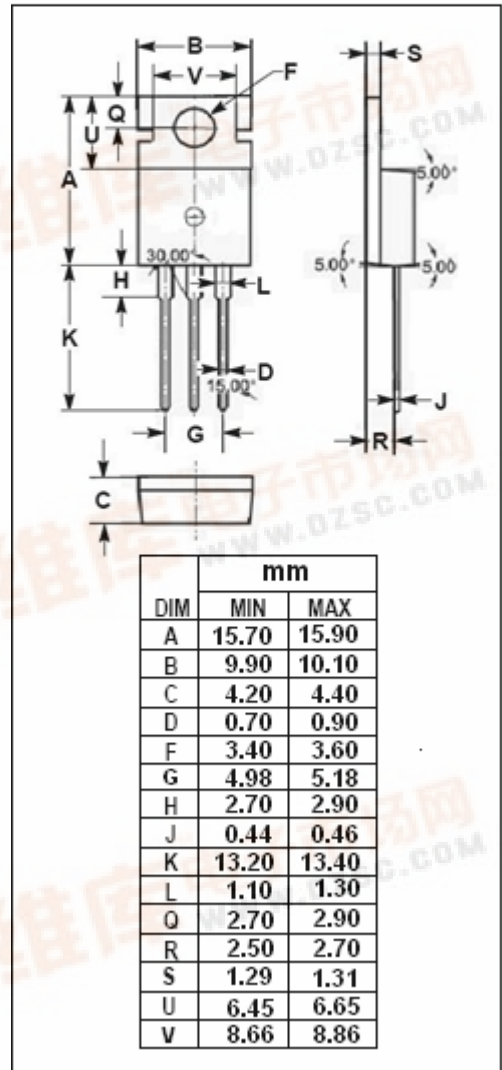
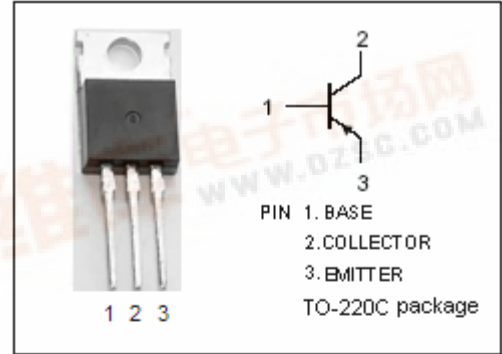
- Designed for use as an output device in complementary audio amplifiers up to 35 watts music power per channel.

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

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-4	V
I_C	Collector Current-Continuous	-10	A
I_B	Base Current-Continuous	-5	A
P_C	Collector Power Dissipation @ $T_C=25^\circ\text{C}$	75	W
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.67	$^\circ\text{C}/\text{W}$



isc Silicon PNP Power Transistor**MJE2901T****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	$I_C = -200\text{mA}; I_B = 0$	-60			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = -4\text{A}; I_B = -0.4\text{A}$			-1.1	V
$V_{BE(on)}$	Base-Emitter On Voltage	$I_C = -3\text{A}; V_{CE} = -2\text{V}$			-1.4	V
I_{CBO}	Collector Cutoff Current	$V_{CB} = -60\text{V}; I_E = 0$ $V_{CB} = -60\text{V}; I_E = 0; T_C = 150^{\circ}\text{C}$			-0.1 -2.0	mA
I_{EBO}	Emitter Cutoff Current	$V_{EB} = -4\text{V}; I_C = 0$			-1.0	mA
h_{FE}	DC Current Gain	$I_C = -3\text{A}; V_{CE} = -2\text{V}$	25		100	