

isc Silicon NPN Power Transistor

MJE2801T

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 MJE2901T

APPLICATIONS

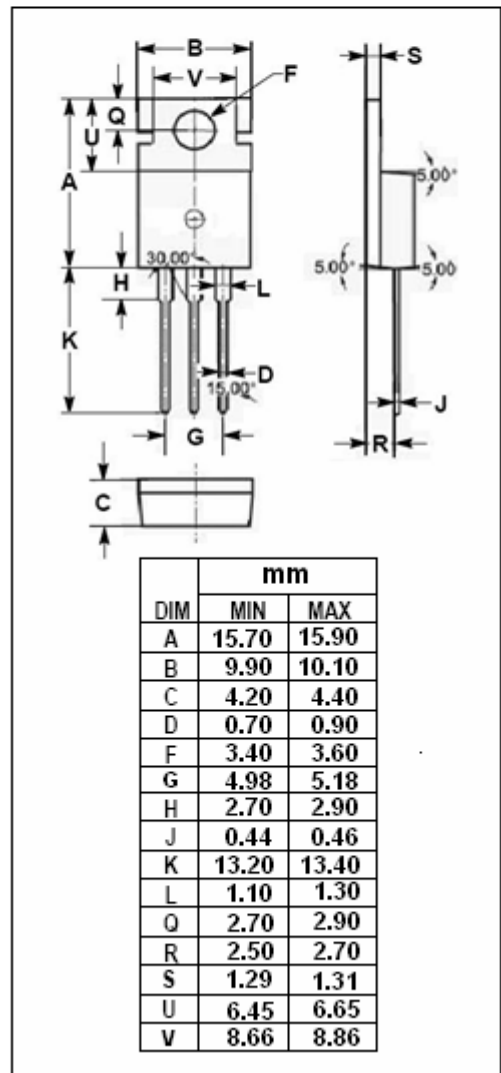
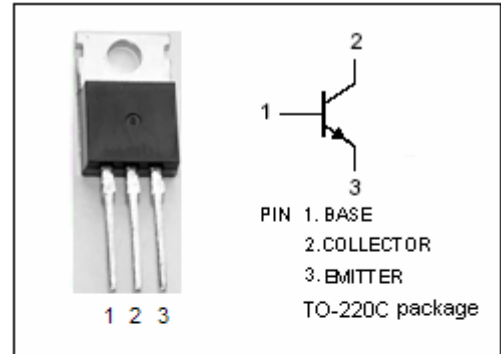
- Designed for use as an output device in complementary audio amplifiers up to 35 watts music power per channel.

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	$^\circ\text{C/W}$



isc Silicon NPN Power Transistor**MJE2801T****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	