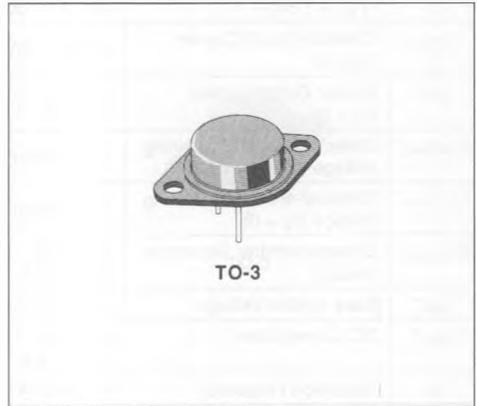




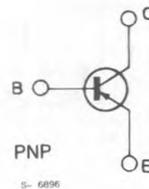
POWER LINEAR AND SWITCHING APPLICATIONS

DESCRIPTION

The MJ2955 is a silicon epitaxial-base PNP power transistor in Jedec TO-3 metal case. It is intended for power switching circuits, series and shunt regulators, output stages and hi-fi amplifiers.



INTERNAL SCHEMATIC DIAGRAM



ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-base Voltage ($I_E = 0$)	- 100	V
V_{CER}	Collector-emitter Voltage ($R_{BE} \leq 100\Omega$)	- 70	V
V_{CEO}	Collector-emitter Voltage ($I_B = 0$)	- 60	V
V_{EBO}	Emitter-base Voltage ($I_C = 0$)	- 7	V
I_C	Collector Current	- 15	A
I_B	Base Current	- 7	A
P_{Tot}	Total Power Dissipation at $T_{Case} \leq 25^\circ C$	150	W
T_{stg}	Storage Temperature	- 65 to 200	$^\circ C$
T_j	Junction Temperature	200	$^\circ C$

THERMAL DATA

$R_{th(j-case)}$	Thermal Resistance Junction-case	Max	1.17	$^{\circ}C/W$
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ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CEX}	Collector Cutoff Current ($V_{BE} = 1.5V$)	$V_{CE} = -100V$ $V_{CE} = -100V$ $T_{case} = 150^{\circ}C$			-1 -5	mA mA
I_{CEO}	Collector Cutoff Current ($I_B = 0$)	$V_{CE} = -30V$			-0.7	mA
I_{EBO}	Emitter Cutoff Current ($I_C = 0$)	$V_{EB} = -7V$			-5	mA
$V_{CER(sus)}^*$	Collector-emitter Sustaining Voltage ($R_{BE} = 100\Omega$)	$I_C = -200mA$	-70			V
$V_{CEO(sus)}^*$	Collector-emitter Sustaining Voltage ($I_B = 0$)	$I_C = -200mA$	-60			V
$V_{CE(sat)}^*$	Collector-emitter Saturation Voltage	$I_C = -4A$ $I_B = -0.4A$ $I_C = -10A$ $I_B = -3.3A$			-1.1 -3	V V
V_{BE}^*	Base-emitter Voltage	$I_C = -4A$ $V_{CE} = -4V$			-1.8	V
h_{FE}^*	DC Current Gain	$I_C = -4A$ $V_{CE} = -4V$ $I_C = -10A$ $V_{CE} = -4V$	20 5		70	
f_T	Transition Frequency	$I_C = -0.5A$ $V_{CE} = -10V$	4			MHz

* Pulsed : pulse duration = 300 μs , duty cycle = 1.5 %.