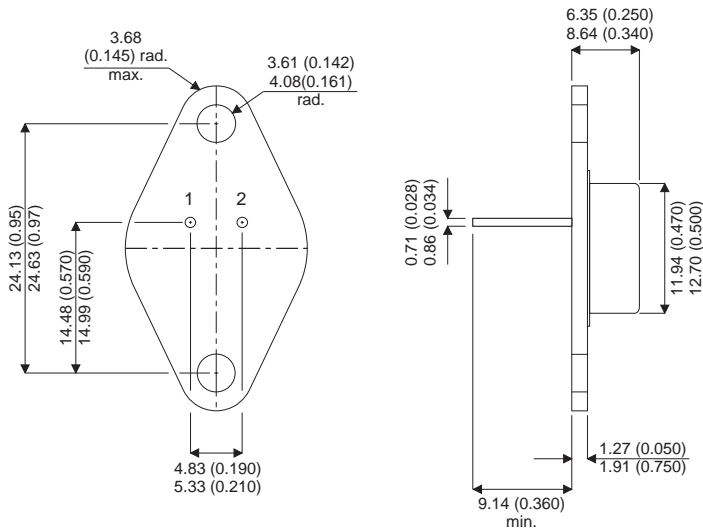


MECHANICAL DATA

Dimensions in mm



PNP POWER TRANSISTOR

TO66 Package. (TO-213AA)

Pin 1 – Base Pin 2 – Emitter Case - Collector

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_{CBO}	Collector – Base Voltage (Open Emitter)	- 160V
V_{CEO}	Collector – Emitter Voltage (Open Base)	- 140V
V_{CER}	Collector – Emitter Voltage $R_{BE} = 100\Omega$	- 150V
V_{CEX}	Collector – Base Voltage $V_{BE} = 1.5V$	- 160V
V_{EBO}	Emitter – Base Voltage	-7V
I_C	Collector Current	-3A
I_{CM}	Peak Collector Current $t_p = 1s$	-4A
I_B	Base Current	-2A
P_{tot}	Power Dissipation $t_{case} = 25^{\circ}C$	25W
T_J	Maximum Junction Temperature	200°C
T_{STG}	Storage Temperature	-65 to 200°C
$R_{th-(j-c)}$	Junction to Case.	7°C / W

Semelab Plc reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by Semelab is believed to be both accurate and reliable at the time of going to press. However Semelab assumes no responsibility for any errors or omissions discovered in its use. Semelab encourages customers to verify that datasheets are current before placing orders.

ELECTRICAL CHARACTERISTICS ($T_{\text{case}} = 25^{\circ}\text{C}$ unless otherwise stated)

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CEX} Collector Emitter Cut Off Current	$V_{\text{CE}} = -140\text{V}$ $V_{\text{BE}} = 1.5\text{V}$			-1	mA
	$T_{\text{case}} = 150^{\circ}\text{C}$			-5	
$V_{(\text{BR})\text{CEO}^*}$ Collector Emitter Breakdown Voltage	$I_{\text{C}} = -100\text{mA}$ $I_{\text{B}} = 0$	-140			V
$V_{(\text{BR})\text{CER}^*}$ Collector Emitter Breakdown Voltage	$I_{\text{C}} = -1\text{mA}$ $R_{\text{BE}} = 100\Omega$	-150			V
$V_{(\text{BR})\text{CEX}^*}$ Collector Emitter Base Breakdown Voltage	$I_{\text{C}} = -1\text{mA}$ $V_{\text{BE}} = -1.5\text{V}$	-160			
$h_{21\text{E}}^*$ Static Forward Current Transfer Ratio	$V_{\text{CE}} = -4\text{V}$ $I_{\text{C}} = -0.5\text{A}$	20		250	—
$V_{\text{CE}(\text{sat})}$ Collector Emitter Saturation Voltage	$I_{\text{C}} = -0.5\text{A}$ $I_{\text{B}} = -0.05\text{A}$			-1	V
V_{BE} Base Emitter Voltage	$V_{\text{CE}} = -4\text{V}$ $I_{\text{C}} = -0.5\text{A}$			-1.7	V
I_{EBO} Emitter Base Cutt-off Current	$V_{\text{CB}} = -7\text{V}$ $I_{\text{C}} = 0$			-1	mA
f_{T} Transition Frequency	$V_{\text{CE}} = -10\text{V}$ $I_{\text{C}} = -0.2\text{A}$ $f = 1\text{MHz}$		4		MHz

* Pulse test $t_{\text{p}} = 300\mu\text{s}$, $\delta < 2\%$