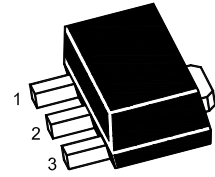


13002U

NPN Silicon Epitaxial Planar Transistor

High voltage power transistor



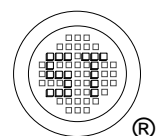
1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	700	V
Collector Emitter Voltage	V_{CEO}	400	V
Emitter Base Voltage	V_{EBO}	9	V
Collector Current	I_{C}	0.2	A
Collector Current (Pulse)	I_{CP}	0.5	A
Total Power Dissipation	P_{tot}	0.6	W
Operating Junction Temperature	T_{j}	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 55 to + 150	$^\circ\text{C}$

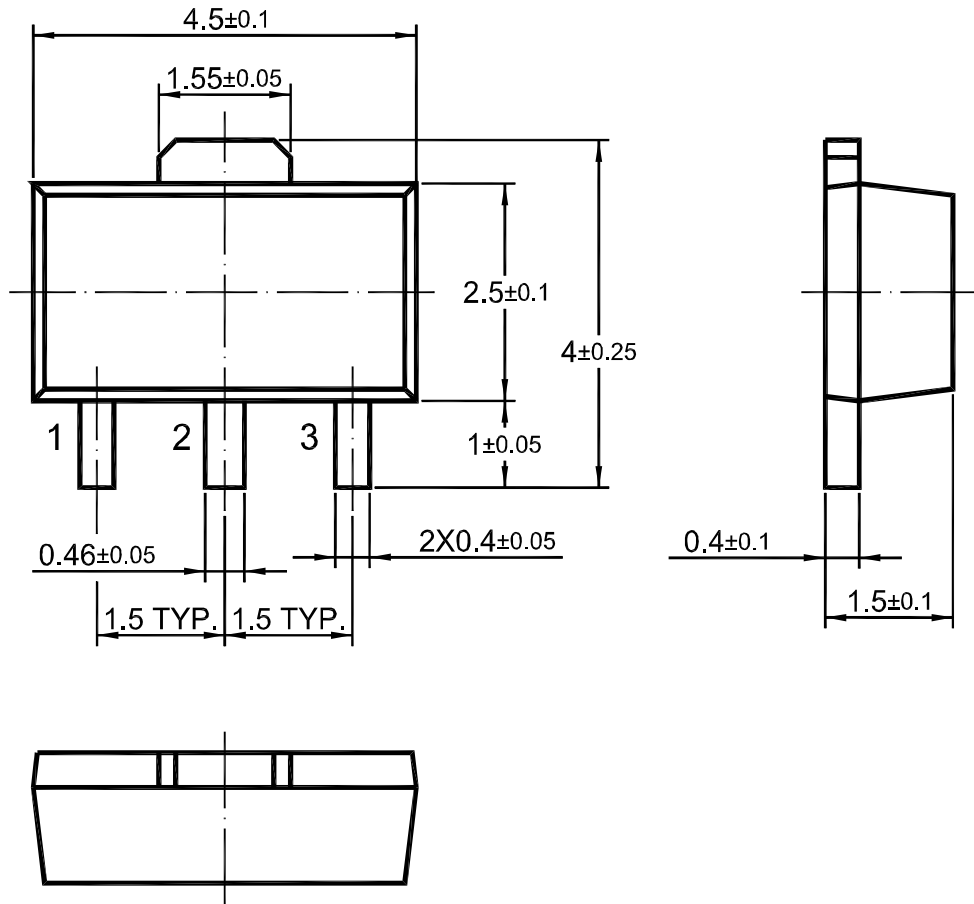
Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
DC Current Gain at $V_{\text{CE}} = 10 \text{ V}$, $I_{\text{C}} = 10 \mu\text{A}$ at $V_{\text{CE}} = 10 \text{ V}$, $I_{\text{C}} = 100 \text{ mA}$ at $V_{\text{CE}} = 10 \text{ V}$, $I_{\text{C}} = 200 \text{ mA}$	h_{FE} h_{FE} h_{FE}	10 20 10	40 40 40	- - -
Collector Base Cutoff Current at $V_{\text{CB}} = 700 \text{ V}$	I_{CBO}	-	100	μA
Emitter Base Cutoff Current at $V_{\text{EB}} = 7 \text{ V}$	I_{EBO}	-	10	μA
Collector Base Breakdown Voltage at $I_{\text{C}} = 10 \text{ mA}$	$V_{(\text{BR})\text{CBO}}$	700	-	V
Collector Emitter Breakdown Voltage at $I_{\text{C}} = 1 \text{ mA}$	$V_{(\text{BR})\text{CEO}}$	400	-	V
Emitter Base Breakdown Voltage at $I_{\text{E}} = 1 \text{ mA}$	$V_{(\text{BR})\text{EBO}}$	9	-	V
Collector Emitter Saturation Voltage at $I_{\text{C}} = 100 \text{ mA}$, $I_{\text{B}} = 10 \text{ mA}$ at $I_{\text{C}} = 200 \text{ mA}$, $I_{\text{B}} = 20 \text{ mA}$	$V_{\text{CE}(\text{sat})}$	- -	0.5 2.5	V
Transition Frequency at $V_{\text{CE}} = 10 \text{ V}$, $I_{\text{C}} = 100 \text{ mA}$	f_{T}	4	-	MHz



13002U

SOT-89 PACKAGE OUTLINE



Dimensions in mm

