

SOT-89-3L Plastic-Encapsulate Transistors

KTA1666

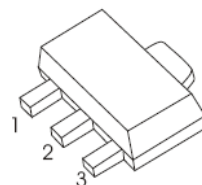
TRANSISTOR (PNP)

FEATURES

- Complementary to KTC4379
- Small Flat Package
- Low Saturation Voltage
- Power Amplifier and Switching Application

SOT-89-3L

1. BASE
2. COLLECTOR
3. EMITTER



MAXIMUM RATINGS ($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current	-2	A
P_C	Collector Power Dissipation	500	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	250	$^{\circ}\text{C/W}$
T_j	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature	-55~+150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -1\text{mA}, I_E = 0$	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10\text{mA}, I_B = 0$	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -1\text{mA}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -50\text{V}, I_E = 0$			-100	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-100	nA
DC current gain	$h_{FE(1)}^*$	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$	70		240	
	$h_{FE(2)}^*$	$V_{CE} = -2\text{V}, I_C = -1.5\text{A}$	40			
Collector-emitter saturation voltage	$V_{CE(sat)}^*$	$I_C = -1\text{A}, I_B = -50\text{mA}$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}^*$	$I_C = -1\text{A}, I_B = -50\text{mA}$			-1.2	V
Collector output capacitance	C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			40	pF
Transition frequency	f_T	$V_{CE} = -2\text{V}, I_C = -500\text{mA}$		120		MHz

*Pulse test: pulse width $\leq 300\text{ms}$, duty cycle $\leq 2.0\%$.

CLASSIFICATION OF $h_{FE(1)}$

RANK	O	Y
RANGE	70 - 140	120 - 240
MARKING	WO	WY

Typical Characteristics

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