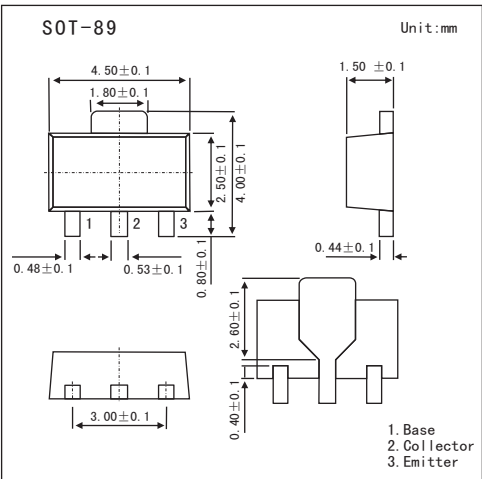


Epitaxial Planar NPN Transistor

KTD1302

Features

Collector Power Dissipation: $P_c=500\text{mW}$
 Collector Current: $I_c=300\text{mA}$



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

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CB0}	25	V
Collector-Emitter voltage	V_{CEO}	25	V
Emitter-base voltage	V_{EB0}	12	V
Collector Current	I_c	300	mA
Collector Power Dissipation	P_c	500	mW
Junction Temperature	T_j	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150	$^{\circ}\text{C}$

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

Parameter	Symbol	Test conditons	Min	Typ	Max	Unit
Collector Cut-off Current	I_{CBO}	$V_{CB}=25\text{V}, I_E=0$			100	nA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=12\text{V}, I_C=0$			100	nA
DC Current Gain	h_{FE}	$V_{CE}=2\text{V}, I_C=4\text{mA}$	200		800	
		$V_{CE}=2\text{V}, I_C=4\text{mA}$	20			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100\text{mA}, I_B=10\text{mA}$			1.0	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=1\text{mA}$		60		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1\text{MHz}$		10		pF

Marking

Marking	BJ
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