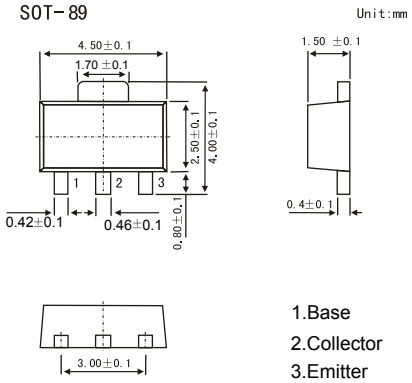
NPN Transistors

KTD1302



■ Features

- Small Flat Package
- Audio Muting Application
- High Emitter-Base Voltage

■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	25	V
Collector - Emitter Voltage	V_{CEO}	20	
Emitter - Base Voltage	V_{EBO}	12	
Collector Current - Continuous	I_C	300	mA
Collector Power Dissipation	P_C	500	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	250	℃/W
Junction Temperature	T_J	150	℃
Storage Temperature Range	T_{stg}	-55 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= 100 μA, I_E= 0	25			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= 1 mA, I_B= 0	20			
Emitter - base breakdown voltage	V_{EBO}	I_E= 100 μ A, I_C= 0	12			
Collector-base cut-off current	I_{CBO}	V_{CB}= 25 V , I_E= 0			0.1	uA
Emitter cut-off current	I_{EBO}	V_{EB}= 12V , I_C=0			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100 mA, I_B=10mA			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=100 mA, I_B=10mA			1	
DC current gain	h_{FE}	V_{CE}= 2V, I_C= 4mA (FOR)	200		800	
		V_{CE}= 2V, I_C= 4mA (REV)	20			
Collector output capacitance	C_{ob}	V_{CB}= 10V, I_E= 0,f=1MHz		10		pF
Transition frequency	f_T	V_{CE}= 10V, I_C= 1mA , f=100MHz		60		MHz

■ Marking

Marking	1302