

SOT-89 Plastic-Encapsulate Transistors

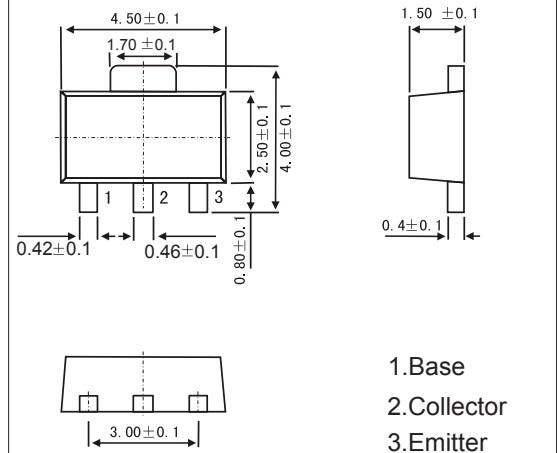
Features

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

MECHANICAL DATA

- Case style:SOT-89molded plastic
- Mounting position:any

SOT-89



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CB0}	25	V
Collector - Emitter Voltage	V_{CEO}	20	
Emitter - Base Voltage	V_{EB0}	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	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{stg}	-55 to 150	

PACKAGE INFORMATION

Device	Package	Shipping
KTD1302	SOT-89	1000/Tape&Reel

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CB0}	$I_C = 100 \mu A, I_E = 0$	25			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C = 1 mA, I_B = 0$	20			
Emitter - base breakdown voltage	V_{EB0}	$I_E = 100 \mu A, I_C = 0$	12			
Collector-base cut-off current	I_{CBO}	$V_{CB} = 25 V, I_E = 0$			0.1	uA
Emitter cut-off current	I_{EBO}	$V_{EB} = 12 V, I_C = 0$			0.1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100 mA, I_B = 10 mA$			0.25	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100 mA, I_B = 10 mA$			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
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