

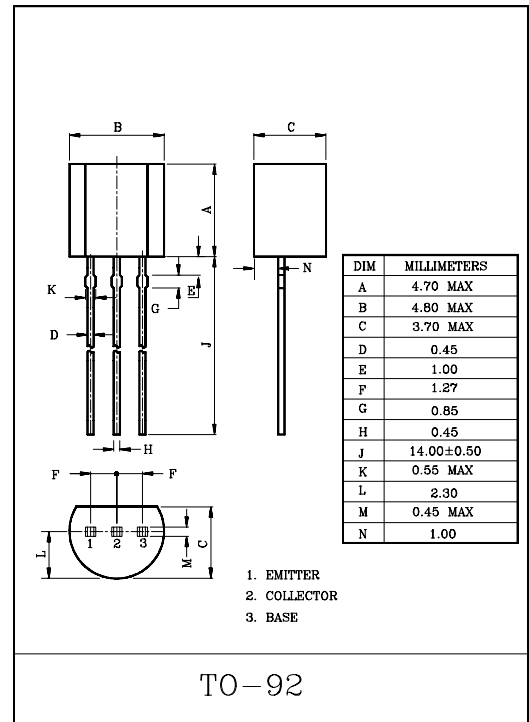
### AUDIO MUTING APPLICATION.

### FEATURES

- High Emitter-Base Voltage :  $V_{EBO}=12V(\text{Min.})$ .
- High Reverse  $h_{FE}$   
: Reverse  $h_{FE}=20(\text{Min.})(V_{CE}=2V, I_C=4mA)$ .
- Low on Resistance :  $R_{ON}=0.6\Omega(\text{Typ.})(I_B=1mA)$ .

### MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	25	V
Collector-Emitter Voltage	$V_{CEO}$	20	V
Emitter-Base Voltage	$V_{EBO}$	12	V
Collector Current	$I_C$	300	mA
Base Current	$I_B$	30	mA
Collector Power Dissipation	$P_C$	625	mW
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ\text{C}$



### ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	$I_{CBO}$	$V_{CB}=25V, I_E=0$	-	-	0.1	$\mu\text{A}$
Emitter Cut-off Current	$I_{EBO}$	$V_{EB}=-12V, I_C=0$	-	-	0.1	$\mu\text{A}$
DC Current Gain	$h_{FE(1)}$ (FOR)	$V_{CE}=2V, I_C=4mA$	200	-	800	
	$h_{FE(2)}$ (REV)	$V_{CE}=2V, I_C=4mA$	20	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=100mA, I_B=10mA$	-	-	0.25	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=100mA, I_B=10mA$	-	-	1.0	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=1mA$	-	60	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	10	-	pF
On Resistance	$R_{on}$	$f=1KHz, I_B=1mA, V_{IN}=0.3V$	-	0.6	-	$\Omega$

# KTD1302

