

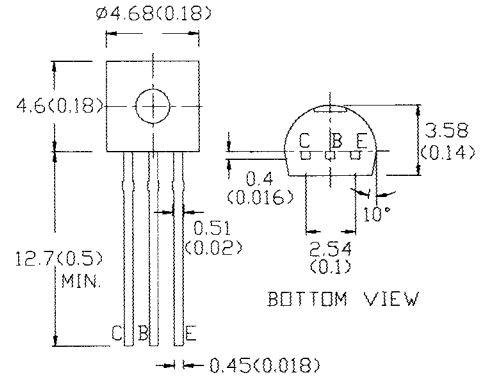
# MICRO ELECTRONICS

**NPN  
SILICON  
TRANSISTOR**

## DESCRIPTION

CL5822 is silicon planar transistors for use in AF drivers and outputs, as well as for universal applications.

TO-92A



UNIT: MM(INCH)

## ABSOLUTE MAXIMUM RATINGS

Collector-Emitter Voltage ( $I_B=0$ )	$V_{CEO}$	60V
Collector-Emitter Voltage ( $V_{EB}=0$ )	$V_{CES}$	70V
Emitter-Base Voltage	$V_{EBO}$	5V
Collector Current	$I_C$	1A
Continuous Power Dissipation	$P_d$	625mW
Operating & Storage Junction Temperature	$T_j, T_{stg}$	-55 to +150°C

## ELECTRO-OPTICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	MIN	MAX	UNIT	CONDITIONS
Collector-Emitter Breakdown Voltage	$V_{CEO}^*$	60		V	$I_C=10\text{mA}$ $I_B=0$
Collector-Emitter Breakdown Voltage	$V_{CES}$	70		V	$I_C=0.01\text{mA}$ $V_{EB}=0$
Collector Cutoff Current	$I_{CBO}$		100	nA	$V_{CB}=25\text{V}$ $I_E=0$
Emitter Cutoff Current	$I_{EBO}$		10	$\mu\text{A}$	$V_{EB}=5\text{V}$ $I_C=0$
D.C. Current Gain	$H_{FE}^*$	100	200		$I_C=2\text{mA}$ $V_{CE}=2\text{V}$
		25			$I_C=500\text{mA}$ $V_{CE}=2\text{V}$
Base-Emitter Voltage	$V_{BE}^*$		1.1	V	$I_C=500\text{mA}$ $V_{CE}=2\text{V}$
Collector-Emitter Saturation Voltage	$V_{CE(sat)}^*$		0.75	V	$I_C=500\text{mA}$ $I_B=50\text{mA}$
Base-Emitter Saturation Voltage	$V_{BE(sat)}^*$		1.2	V	$I_C=500\text{mA}$ $I_B=50\text{mA}$
Output Capacitance	$C_{ob}$		15	pF	$V_{CB}=10\text{V}$ $I_E=0$
					$f=1\text{MHz}$
Current Gain-Bandwidth Product	$f_T$	140	TYP	MHz	$I_C=50\text{mA}$ $V_{CE}=2\text{V}$

\* Pulse test : pulse width  $<300\mu\text{s}$ , duty cycle  $<2\%$ .



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