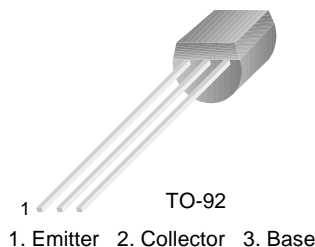


# BC63916

BC63916

## Switching and Amplifier Applications



## NPN Epitaxial Silicon Transistor

### Absolute Maximum Ratings $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
$V_{CER}$	Collector-Emitter Voltage at $R_{BE}=1K\Omega$	100	V
$V_{CES}$	Collector-Emitter Voltage	100	V
$V_{CEO}$	Collector-Emitter Voltage	80	V
$V_{EBO}$	Emitter-Base Voltage	5	V
$I_C$	Collector Current	1	A
$P_C$	Collector Power Dissipation	1	W
$T_J, T_{STG}$	Operating and Storage Junction Temperature Range	-55 ~ 150	$^\circ\text{C}$

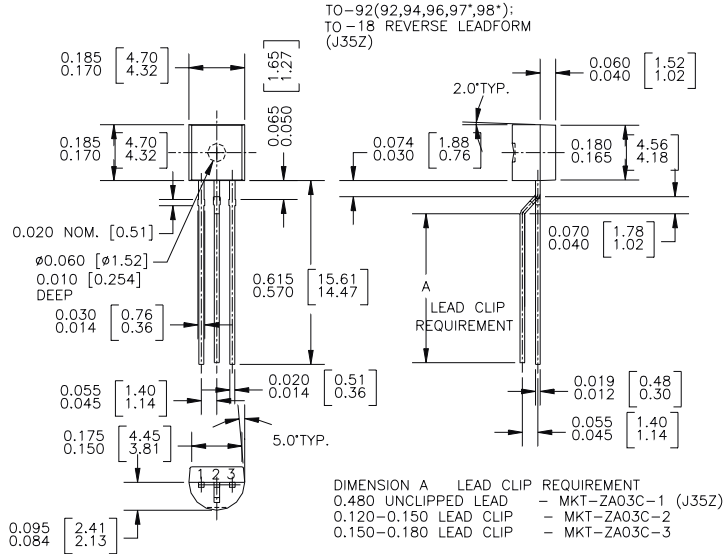
•  $PW=5\text{ms}$ , Duty Cycle=10%

### Electrical Characteristics $T_a=25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Min.	Typ.	Max.	Units
$BV_{CBO}$	Collector-Base Breakdown Voltage	$I_C = 100\mu\text{A}, I_E = 0$	100			V
$BV_{CEO}$	Collector-Emitter Breakdown Voltage	$I_C = 10\text{mA}, I_B = 0$	80			V
$BV_{EBO}$	Emitter-Base Breakdown Voltage	$I_E = 10\mu\text{A}, I_C = 0$	5.0			V
$I_{CBO}$	Collector Cut-off Current	$V_{CB} = 30\text{V}, I_E = 0$			100	nA
$I_{EBO}$	Emitter Cut-off Current	$V_{EB} = 5\text{V}, I_C = 0$			10	$\mu\text{A}$
$h_{FE1}$	DC Current Gain	$V_{CE} = 2\text{V}, I_C = 5\text{mA}$	25			
$h_{FE2}$		$V_{CE} = 2\text{V}, I_C = 150\text{mA}$	100		250	
$h_{FE3}$		$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	25			
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C = 500\text{mA}, I_B = 50\text{mA}$			0.5	V
$V_{BE(on)}$	Base-Emitter On Voltage	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$			1	V
$f_T$	Current Gain Bandwidth Product	$V_{CE} = 5\text{V}, I_C = 10\text{mA}, f = 50\text{MHz}$		100		MHz

Package Dimensions

TO-92



**Note:** All package 97 or 98 transistors are leadformed to this configuration prior to bulk shipment. Order L34Z option if in-line leads are preferred on package 97 or 98.

\* Standard Option on 97 & 98 package code

Dimensions in Millimeters

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