

## BUW58

Silicon NPN Transistors



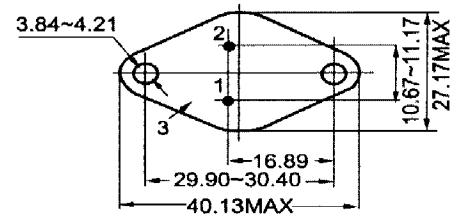
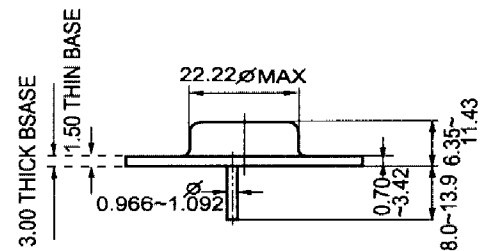
1B 2E 3C

### ◆ Features

- With TO-3 package

### ◆ Absolute Maximum Ratings $T_c=25^\circ\text{C}$

SYMBOL	PARAMETER	RATING	UNIT
$V_{CB}$	Collector to base voltage	250	V
$V_{CEO}$	Collector to emitter voltage	160	V
$V_{CER}$	Emitter to base voltage		
$V_{EB}$	Emitter to base voltage	5.0	V
$I_B$	Base Current		
$I_C$	Collector current-Continuous	20	A
$P_D$	Total Power Dissipation@ $T_c=25^\circ\text{C}$	120	W
$T_j$	Junction temperature	200	$^\circ\text{C}$
$T_{stg}$	Storage temperature	-65~200	$^\circ\text{C}$



TO-3

### ◆ Electrical Characteristics $T_c=25^\circ\text{C}$

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CEO}$	Collector-Emitter Sustaining Voltage	$I_C=100\text{mA}; I_B=0$	160			V
$V_{CER}$	Collector-Emitter Sustaining Voltage					
$I_{CEO}$	Collector Cutoff Current	$V_{CE}=160\text{V}; I_B=0$			0.5	mA
$I_{CEX}$	Collector Cutoff Current					
$I_{CBO}$	Collector-emitter breakdown voltage	$V_{CB}=250\text{V}; I_E=0$			0.1	mA
$V_{EBO}$	Emitter Cutoff Current	$I_E=1\text{mA}; I_C=0$	5			V
$V_{CE(sat-1)}$	Collector-emitter saturation voltages	$I_C=6.0\text{A}; I_B=0.6\text{A}$			0.6	V
$V_{CE(sat-2)}$	Collector-emitter saturation voltages					
$V_{CE(sat-3)}$	Collector-emitter saturation voltages					
$V_{CE(sat-4)}$	Collector-emitter saturation voltages					
$h_{FE-1}$	Forward current transfer ratio	$I_C=15\text{A}; V_{CE}=1.5\text{V}$	10			
$h_{FE-2}$	Forward current transfer ratio					
$V_{BE(on)}$	Base-emitter On voltages					
$f_T$	Current Gain-Bandwidth Product	$I_C=0.5\text{A}; V_{CE}=10\text{V}$		15		MHz

