

## isc Silicon NPN Power Transistor

3DA98B

### DESCRIPTION

- High DC Current Gain-  
:  $h_{FE} > 15 @ I_C = 1.5A$
- Excellent Safe Operating Area
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

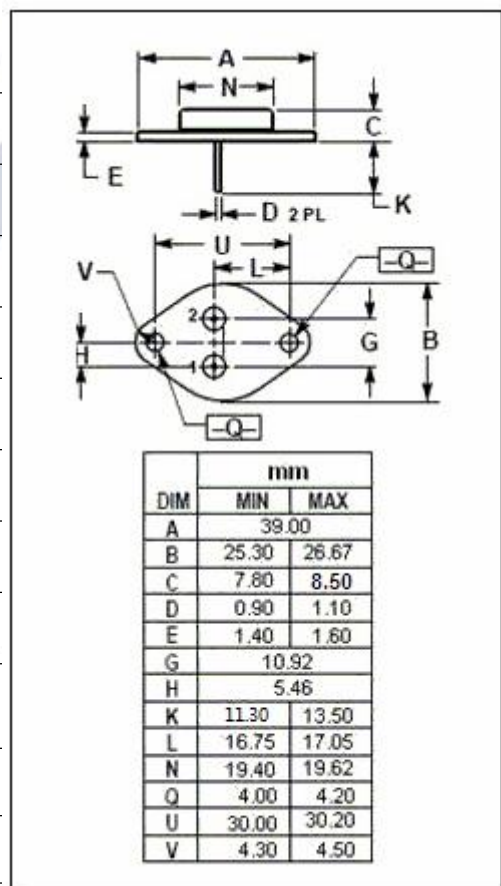
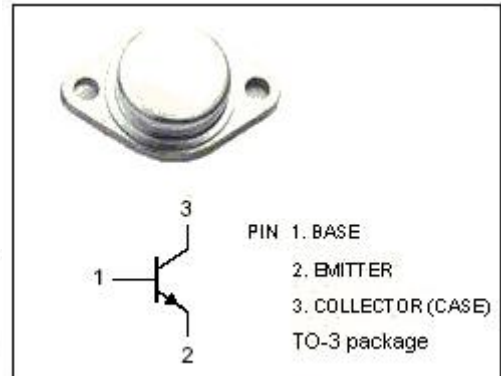
- Designed for use as an output device in complementary audio amplifiers

### ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	80	V
$V_{CEO}$	Collector-Emitter Voltage	70	V
$V_{EBO}$	Emitter-Base Voltage	4	V
$I_C$	Collector Current-Continuous	5	A
$P_C$	Collector Power Dissipation@ $T_C=25^\circ C$	15	W
$T_J$	Junction Temperature	175	$^\circ C$
$T_{stg}$	Storage Temperature Range	-55-175	$^\circ C$

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^\circ C/W$



**isc Silicon NPN Power Transistor****3DA98B****ELECTRICAL CHARACTERISTICS** $T_c=25^{\circ}\text{C}$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
$V_{CEO(BR)}$	Collector-Emitter Breakdown Voltage	$I_C=10\text{mA}; I_B=0$	70			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=3\text{A}; I_B=0.6\text{A}$			2	V
$I_{CBO}$	Collector Cutoff Current	$V_{CB}=60\text{V}; I_E=0$			2.0	mA
$I_{EBO}$	Emitter Cutoff current	$V_{EB}=2\text{V}; I_C=0$			1.0	mA
$h_{FE}$	DC Current Gain	$I_C=1.5\text{A}; V_{CE}=5\text{V}$	10			

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