

**isc Silicon NPN Power Transistor**
**3DA77**
**DESCRIPTION**

- High DC Current Gain  
:  $h_{FE} = 10(\text{MAX}) @ I_C = 1.5\text{A}$
- Excellent Safe Operating Area
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**APPLICATIONS**

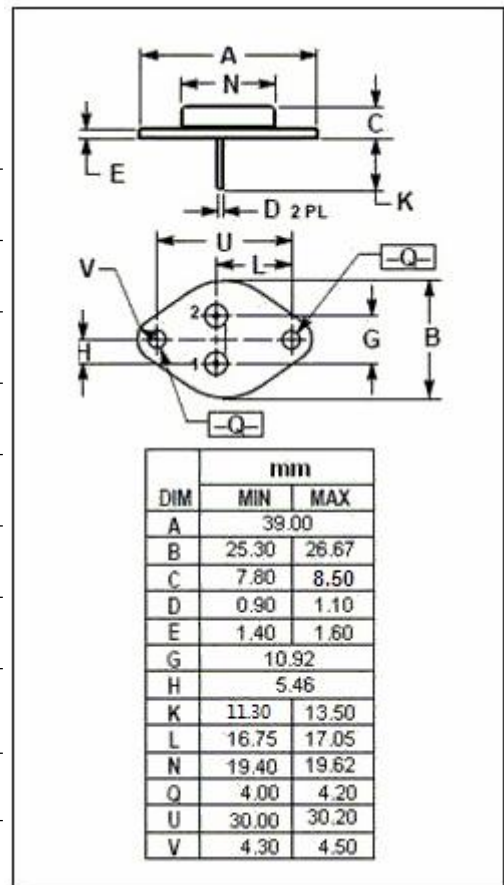
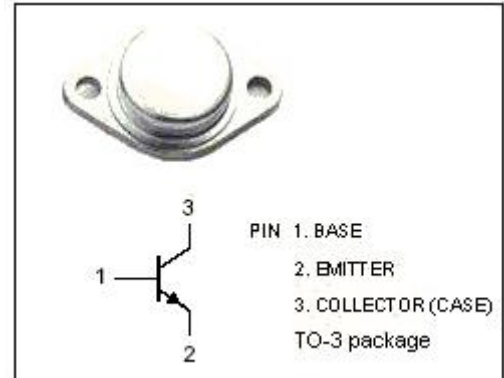
- Designed for use as an output device in complementary audio amplifiers

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CEO}$	Collector-Emitter Voltage	70	V
$V_{EBO}$	Emitter-Base Voltage	1	V
$I_C$	Collector Current-Continuous	5.0	A
$P_C$	Collector Power Dissipation @ $T_c = 75^\circ\text{C}$	40	W
$T_J$	Junction Temperature	175	$^\circ\text{C}$
$T_{stg}$	Storage Temperature Range	-55-175	$^\circ\text{C}$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th(j-c)}$	Thermal Resistance, Junction to Case	1.25	$^\circ\text{C/W}$



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## ELECTRICAL CHARACTERISTICS

T<sub>c</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(BR)</sub>	Collector-Emitter Breakdown Voltage	I <sub>C</sub> =20mA; I <sub>B</sub> =0	70		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> =5A; I <sub>B</sub> =1A		3	V
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> =24V; I <sub>E</sub> =0		3	mA
I <sub>CEO</sub>	Emitter Cutoff current	V <sub>CE</sub> =20V; I <sub>C</sub> =0		1	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> =1.5A; V <sub>CE</sub> =5V	10		

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