

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

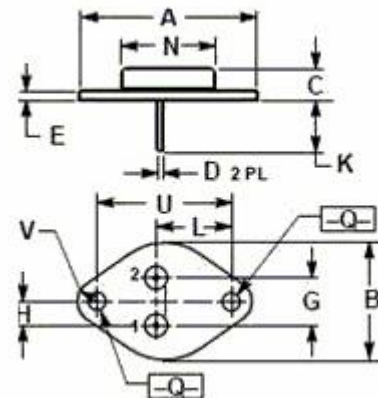
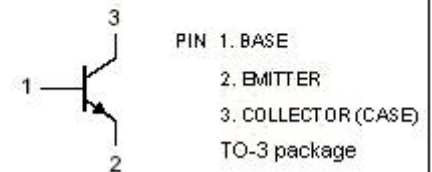
- Designed for use as an output device in complementary audio amplifiers

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	$^\circ\text{C/W}$



DIM	mm	
	MIN	MAX
A		39.00
B	25.30	26.67
C	7.80	8.50
D	0.90	1.10
E	1.40	1.60
G		10.92
H		5.46
K	11.30	13.50
L	16.75	17.05
N	19.40	19.62
Q	4.00	4.20
U	30.00	30.20
V	4.30	4.50

isc Silicon NPN Power Transistor**3DA77****ELECTRICAL CHARACTERISTICS****T_C=25°C unless otherwise specified**

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V _{CEQ(BR)}	Collector-Emitter Breakdown Voltage	I _C =20mA; I _B =0	70		V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C =5A; I _B =1A		3	V
I _{CBO}	Collector Cutoff Current	V _{CB} =24V; I _E =0		3	mA
I _{CEO}	Emitter Cutoff current	V _{CE} =20V; I _C =0		1	mA
h _{FE}	DC Current Gain	I _C =1.5A; V _{CE} =5V	10		

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