

**isc Silicon PNP Power Transistors**

**3AD53**

**DESCRIPTION**

- DC Current Gain-  
:  $h_{FE}=20-140@I_C=-4A$
- Collector-Emitter Saturation Voltage-  
:  $V_{CE(sat)}=-1.0V(Max)@I_C=-4A$

**APPLICATIONS**

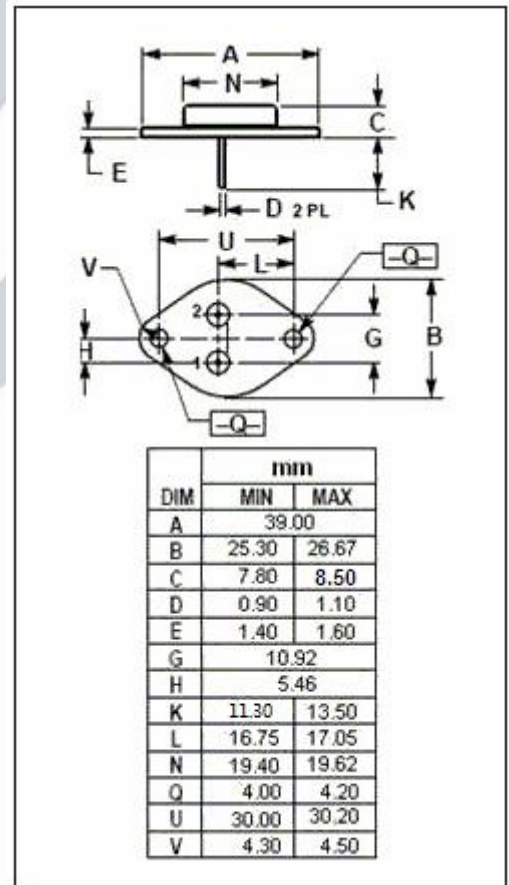
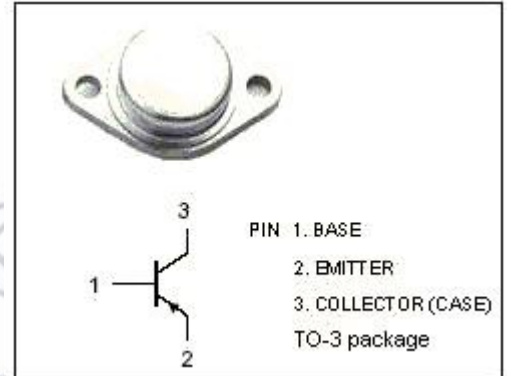
- Designed for general-purpose switching and amplifier applications

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

SYMBOL	PARAMETER	VALUE	UNIT
$V_{CBO}$	Collector-Base Voltage	-70	V
$V_{CEO}$	Collector-Emitter Voltage	-24	V
$V_{EBO}$	Emitter-Base Voltage	-20	V
$I_C$	Collector Current-Continuous	-6	A
$P_C$	Collector Power Dissipation @ $T_C=55^{\circ}C$	20	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55-150	$^{\circ}C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.75	$^{\circ}C/W$



**isc Silicon PNP Power Transistors****3AD53****ELECTRICAL CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-Emitter Sustaining Voltage	I <sub>C</sub> = -50mA ; I <sub>B</sub> = 0	-24		V
V <sub>CE(sat)</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -4A; I <sub>B</sub> = -0.4A		-1.0	V
V <sub>BE(on)</sub>	Base-Emitter On Voltage	I <sub>C</sub> = -4A ; V <sub>CE</sub> = -4V		-1.5	V
I <sub>CEO</sub>	Collector Cutoff Current	V <sub>CE</sub> = -10V; I <sub>B</sub> = 0		-10	mA
I <sub>CBO</sub>	Collector Cutoff Current	V <sub>CB</sub> = -20V; I <sub>E</sub> = 0		-0.5	mA
h <sub>FE</sub>	DC Current Gain	I <sub>C</sub> = -4A ; V <sub>CE</sub> = -2V	20	140	
f <sub>T</sub>	Current Gain-Bandwidth Product	I <sub>C</sub> = -0.5A ; V <sub>CE</sub> = -10V; f <sub>test</sub> = 1.0MHz	10		MHz