

**Silicon PNP Power Transistors****2N6420****DESCRIPTION**

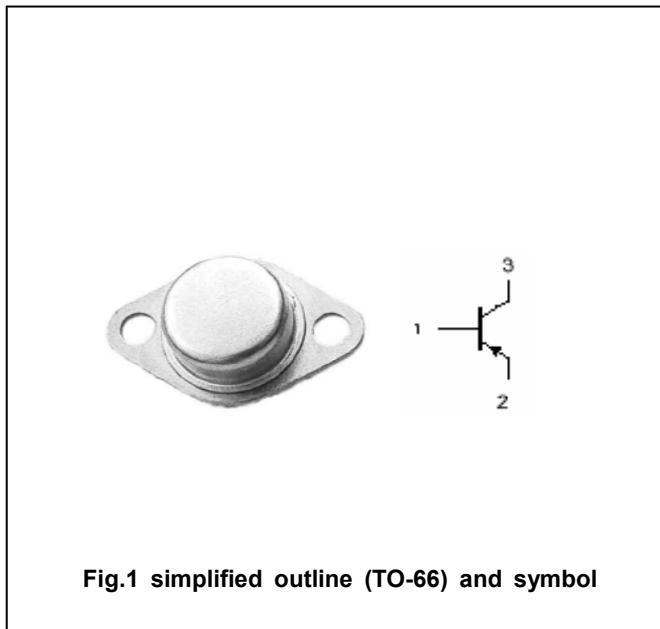
- With TO-66 package
- Continuous collector current- $I_C=1A$
- Power dissipation - $PD=35W @ T_c=25^\circ C$
- Complement to type 2N3583

**APPLICATIONS**

- High speed switching and linear amplifier
- High-voltage operational amplifiers
- Switching regulators ,converters
- Deflection stages and high fidelity amplifiers

**PINNING (See Fig.2)**

PIN	DESCRIPTION
1	Base
2	Emitter
3	Collector

**Absolute maximum ratings( $T_a=25^\circ C$ )**

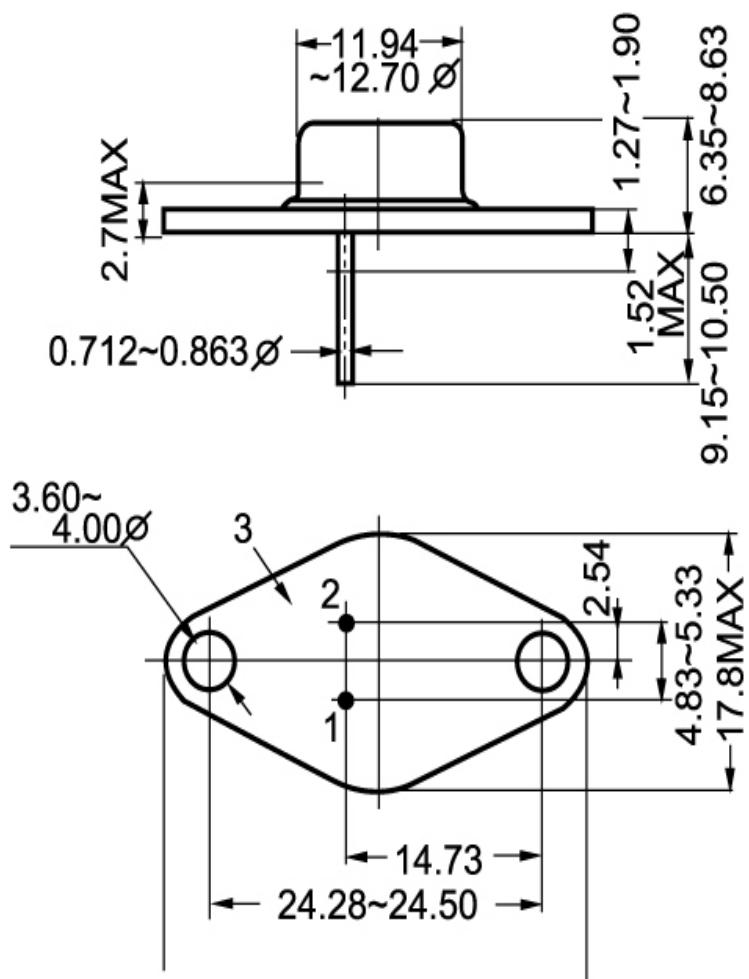
SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$V_{CBO}$	Collector-base voltage	Open emitter	-250	V
$V_{CEO}$	Collector-emitter voltage	Open base	-175	V
$V_{EBO}$	Emitter-base voltage	Open collector	-6	V
$I_C$	Collector current		-1.0	A
$I_{CM}$	Collector current-Peak		-5.0	A
$I_B$	Base current		-1.0	A
$P_T$	Total power dissipation	$T_c=25^\circ C$	35	W
$T_j$	Junction temperature		200	$^\circ C$
$T_{stg}$	Storage temperature		-65~200	$^\circ C$

**THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th,j-C}$	Thermal resistance junction to case	5.0	$^\circ C/W$

**Silicon PNP Power Transistors****2N6420****CHARACTERISTICS**T<sub>j</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>CEO(SUS)</sub>	Collector-emitter sustaining voltage	I <sub>C</sub> =-50mA ; I <sub>B</sub> =0	-175			V
V <sub>CEsat</sub>	Collector-emitter saturation voltage	I <sub>C</sub> =-1A; I <sub>B</sub> =-0.125A			-5.0	V
V <sub>BE</sub>	Base -emitter on voltage	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-10V			-1.4	V
I <sub>CEX</sub>	Collector cut-off current	V <sub>CE</sub> =-225V; V <sub>BE(off)</sub> =-1.5V T <sub>C</sub> =150°C			-1.0 -3.0	mA
I <sub>CEO</sub>	Collector cut-off current	V <sub>CE</sub> =-150V ;I <sub>B</sub> =0			-10	mA
I <sub>EBO</sub>	Emitter cut-off current	V <sub>EB</sub> =-6V; I <sub>C</sub> =0			-5.0	mA
h <sub>FE-1</sub>	DC current gain	I <sub>C</sub> =-0.1A ; V <sub>CE</sub> =-10V	40			
h <sub>FE-2</sub>	DC current gain	I <sub>C</sub> =-0.5A ; V <sub>CE</sub> =-10V	40		200	
h <sub>FE-3</sub>	DC current gain	I <sub>C</sub> =-1A ; V <sub>CE</sub> =-10V	10			

**Silicon PNP Power Transistors****2N6420****PACKAGE OUTLINE****Fig.2 Outline dimensions**