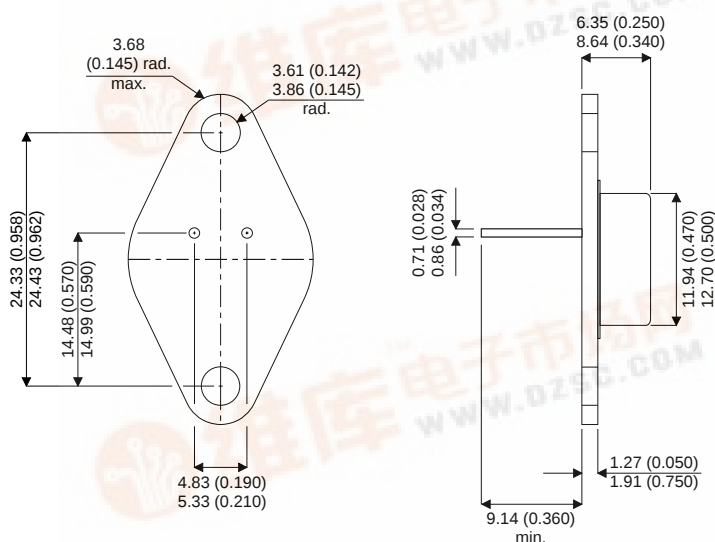


Dimensions in mm

NPN POWER TRANSISTOR IN A HERMETIC PACKAGE



Pin 1 – Base Pin 2 – Emitter Case - Collector

FEATURES

- **GENERAL PURPOSE SWITCHING AND AMPLIFIER APPLICATIONS.**
 - **MAINTENANCE STATUS**
- DO NOT USE ON NEW DESIGNS**

ABSOLUTE MAXIMUM RATINGS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

V_{CBO}	Collector – Base Voltage	90V
V_{CEO}	Collector – Emitter Voltage	55V
V_{CER}	Collector – Emitter Voltage ($R_{BE} = 100\Omega$)	60V
V_{EB}	Emitter – Base Voltage	7.0V
I_C	Continuous Collector Current	4A
$I_{C(PK)}$	Peak Collector Current	10A
I_B	Base Current	2A
P_D	Total Dissipation at $T_{case} = 25^\circ C$	75W
	Derate above $25^\circ C$	0.43W/ $^\circ C$
$T_{J, STG}$	Operating and Storage Junction Temperature Range	-65 to $+200^\circ C$

THERMAL CHARACTERISTICS

CHARACTERISTIC		
$R_{\theta JC}$	Thermal Resistance, Junction To Case	2.33°C/W

ELECTRICAL CHARACTERISTICS ($T_{case} = 25^{\circ}C$ unless otherwise stated)

Parameter		Test Conditions		Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS							
V _{CEO(sus)}	Collector – Emitter Sustaining Voltage	I _C = 100mA	I _B = 0	55			V
V _{CER(sus)}	Collector – Emitter Sustaining Voltage	I _C = 100mA	R _{BE} = 100Ω	60			V
I _{CEO}	Collector – Cutoff Current	V _{CE} = 30 V	I _B = 0			500	μA
I _{CEX}	Collector – Cutoff Current	V _{CE} = 90 V	T _C = 150°C			1	mA
		V _{BE(off)} =1.5V				6	
I _{EBO}	Emitter Cut–Off Current	V _{BE} = 7.0V	I _C = 0			1	mA
ON CHARACTERISTICS							
h _{FE}	DC Current Gain	I _C = 0.5A	V _{CE} = 4.0 V	25		150	–
		I _C = 3.0A	V _{CE} = 4.0V	5			
V _{CE(SAT)}	Collector – Emitter Saturation Voltage	I _C = 500mA	I _B = 50mA			1	V
		I _C = 3.0A	I _B = 1.0A			6	
V _{BE(on)}	Base – Emitter On Voltage	I _C = 500mA	V _{CE} = 4.0V			1.7	
DYNAMIC CHARACTERISTICS							
f _t	Current – Gain Bandwidth Product	I _C = 200mA	V _{CE} = 10V	3.0			MHz
h _{fe}	Small – Signal Current Gain	I _C = 100 f = 1.0 KHz	V _{CE} = 4V	25		180	–
f _{hfe}	Common – Emitter Cutoff Frequency	I _C = 100mA	V _{CE} = 4.0 V	30			KHz

* Pulse test : Pulse Width < 300 μs ,Duty Cycle < 2%