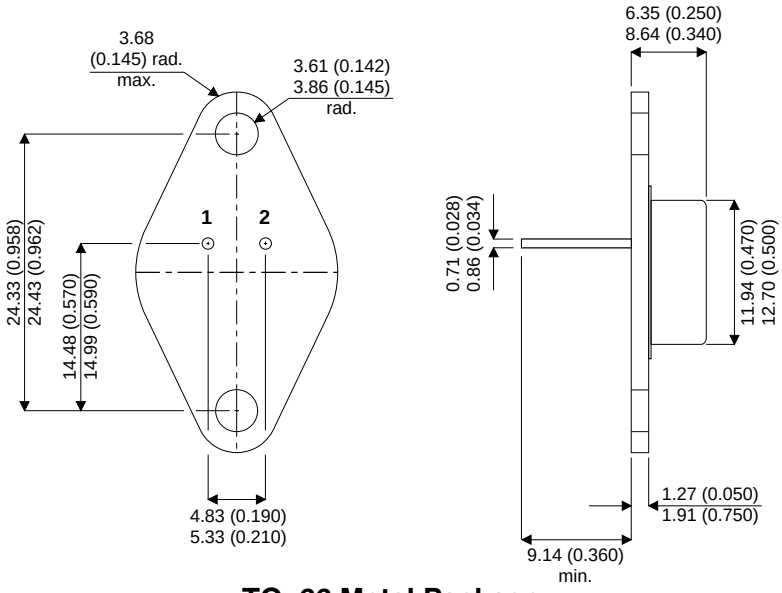
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SJ5439

MECHANICAL DATA

Dimensions in mm (inches)



TO–66 Metal Package.

Pin 1 – Base Pin 2 – Emitter Case – Collector

NPN DRIVER TRANSISTOR

- **Bipolar Power Transistor**
- **TO–66 Hermetic Package**
- **Fast Switching**

ABSOLUTE MAXIMUM RATINGS (T_{case} = 25°C unless otherwise stated)

V_{CEO}	Collector – Emitter Voltage	60V
I_C	Continuous Collector Current	3A
P_D	Total Device Dissipation	16W
	Derate above 100°C	6.25°C/W
T_{STG} , T_J	Storage and Operating Junction Temperature Range	–55 to +200°C

Semelab plc. Telephone +44(0)1455 556565. Fax +44(0)1455 552612.
E-mail: sales@semelab.co.uk Website: http://www.semelab.co.uk

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Parameter		Test Conditions		Min.	Typ.	Max.	Units
BV_{CEO}	Collector – Emitter Breakdown Voltage	I_C = 50mA		60			V
BV_{EBO}	Emitter – Base Breakdown Voltage	I_E = 100μA		7			
BV_{CBO}	Collector – Base Breakdown Voltage	I_C = 100μA		60			
I_{CEO}	Collector Cut-off Current	V_{CE} = 60V				20	μA
I_{EBO}	Emitter Cut-off Current	V_{EB} = 6V				5	
I_{CES}	Emitter Cut-off Current	V_{CE} = 60V				20	
H_{FE1}	Current Gain	V_{CE} = 10V	I_C = 0.5A	40		120	—
H_{FE2}	Current Gain	V_{CE} = 10V	I_C = 0.2A	30		120	
h_{fe}	Current Gain	V_{CE} = 15V f = 10MHz	I_C = 0.5A	3			—
C_{ob}	Output Capacitance	V_{CB} = 10V	f = 1MHz			160	pF
$V_{CEO(sus)}$	Collector – Emitter Saturation Voltage	I_C = 2A	I_B = 0.2A			0.8	V
$V_{BEO(sus)}$	Base – Emitter Saturation Voltage	I_C = 2A	I_B = 0.2A			1.5	
t_{on}	Turn-On Time	I_C = 1A	I_B = 0.1A			500	ns
t_{off}	Turn-Off Time	I_C = 1A	I_B = 0.1A			2.5	μs

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