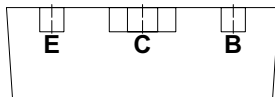
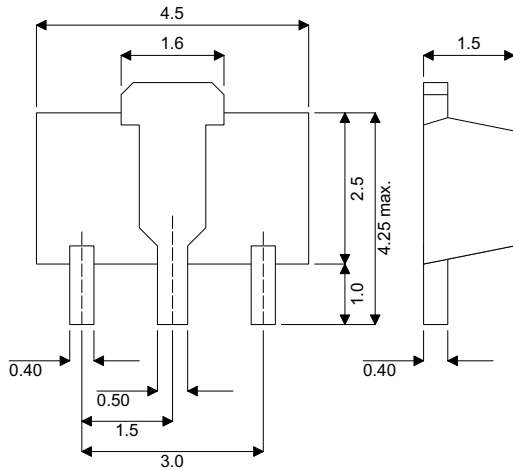


MECHANICAL DATA

Dimensions in mm



SOT89

NPN EPITAXIAL PLANAR SILICON TRANSISTOR

Ideal for high current driver applications requiring low loss devices

FEATURES

- **LOW $V_{CE(SAT)}$**
- **HIGH CURRENT**
- **HIGH ENERGY RATING**

APPLICATIONS

- **ANY HIGH CURRENT DRIVER APPLICATIONS REQUIRING EFFICIENT LOW LOSS DEVICES**

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

V_{CBO}	Collector – Base voltage	30V
V_{CEO}	Collector – Emitter voltage ($I_B = 0$)	10V
V_{EBO}	Emitter – Base voltage	6V
I_C	Collector current	3A
I_{CP}	Collector Current (Pulse)	5A
P_C	Collector Dissipation	500mW
	(Mounted on Ceramic Board (250mm ² x 0.8mm))	1.3W
T_j	Junction Temperature	150°C
T_{stg}	Storage Temperature	-55 to 150°C

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

Parameter	Test Conditions	Min.	Typ.	Max.	Unit.
$V_{(BR)CEO}$ Collector – Emitter Base Breakdown Voltage	$I_C = 1\text{mA}$ $R_{BE} = 0$	10			V
$V_{(BR)CBO}$ Collector – Base Breakdown Voltage	$I_C = 10\mu\text{A}$ $I_E = 0$	30			V
$V_{(BR)EBO}$ Emitter Base Breakdown Voltage	$I_C = 0$ $I_E = 10\mu\text{A}$	6			V
I_{CBO} Collector Cut-Off Current	$V_{CB} = 20\text{V}$ $I_E = 0$			100	nA
I_{EBO} Emitter Cut-Off Current	$V_{BE} = 4\text{V}$ $I_C = 0$			100	nA
h_{FE} DC Current Gain	$V_{CE} = 2\text{V}$ $I_C = 3\text{A}$	140	210		—
f_T Transition frequency	$V_{CE} = 10\text{V}$ $I_C = 50\text{mA}$		200		MHz
C_{ob} Output Capacitance	$V_{CB} = 10\text{V}$ $f = 1\text{MHz}$	30			pF

