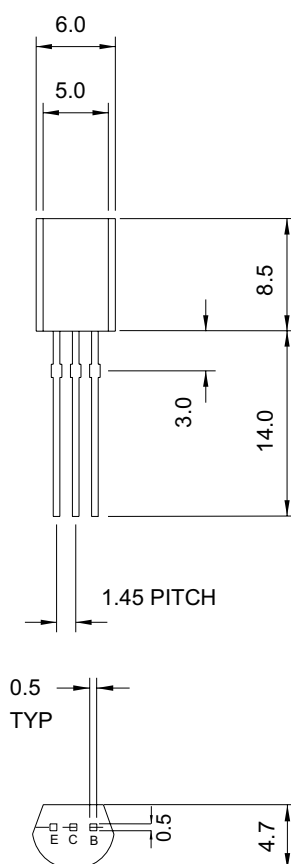


MECHANICAL DATA

Dimensions in mm



TO92(EXTENDED)

NPN EPITAXIAL PLANAR SILICON TRANSISTOR

Ideal for high current driver applications requiring efficient 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	60V
V_{CEO}	Collector – Emitter voltage	20V
V_{EBO}	Emitter – Base voltage	6V
I_C	Collector current	5A
$I_{C(PK)}$	Peak Collector current	8A
P_{tot}	Total Dissipation at $T_{case} = 25^{\circ}C$	0.9W
T_{stg}	Storage Temperature	-55 to $150^{\circ}C$
T_j	Maximum Operating Junction Temperature	$150^{\circ}C$

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

Parameter		Test Conditions		Min.	Typ.	Max.	Unit.
I_{CBO}	Collector Cut-Off Current	$V_{CB} = 50V$	$I_E = 0$			1	μA
I_{EBO}	Emitter Cut-Off Current	$V_{EB} = 5V$	$I_C = 0$			1	μA
$V_{CE(sat)*}$	Collector – Emitter Saturation Voltage	$I_C = 3A$	$I_B = 60mA$			0.5	V
$V_{BE(sat)*}$	Base – Emitter Saturation Voltage	$I_C = 3A$	$I_B = 60mA$	0.6		1.5	V
h_{FE*}	DC Current Gain	$V_{CE} = 2V$ $V_{CE} = 2V$	$I_C = 0.5A$ $I_C = 3A$	100 75		560	—
f_T	Transition frequency	$V_{CE} = 10V$	$I_C = 50mA$		120		MHz
C_{ob}	Output Capacitance	$V_{CB} = 10V$	$f = 1MHz$		45		pF

* Pulse test $t_p = 300\mu s$, $\delta \leq 2\%$

