

N-P-N SILICON POWER TRANSISTOR

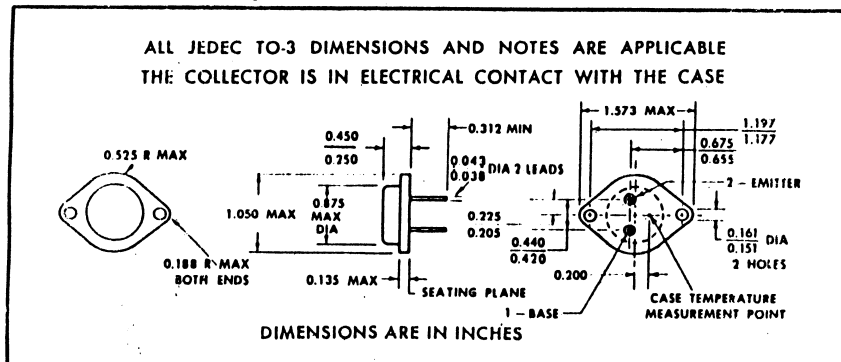
ABSOLUTE MAXIMUM RATINGS

$V_{CBO}$	Collector-base voltage ( $I_E = 0$ )	80V
$V_{CEV}$	Collector-emitter voltage ( $V_{BE} = -1.5$ V)	70V
$V_{CER}$	Collector-emitter voltage ( $R_{BE} \leq 100 \Omega$ )	—
$V_{CEO}$	Collector-emitter voltage ( $I_B = 0$ )	60V
$V_{EBO}$	Emitter-base voltage ( $I_C = 0$ )	7V
$I_C$	Collector current	15A
$I_B$	Base current	7A
$P_{tot}$	Total power dissipation at $T_{case} \leq 25^\circ\text{C}$	115W
$T_{stg}$	Storage temperature	-65 to 200 °C
$T_J$	Junction temperature	200 °C

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

Parameter	Test conditions	Min.	Typ.	Max.	Unit
$I_{CEV}$	Collector cutoff current ( $V_{BE} = -1.5$ V)	$V_{CE} = 80$ V			mA
					mA
		$V_{CE} = 80$ V	$T_{case} = 150^\circ\text{C}$	5	mA
				30	mA
$I_{CEO}$	Collector cutoff current ( $I_B = 0$ )	$V_{CE} = 30$ V		0.7	mA
$I_{EBO}$	Emitter cutoff current ( $I_C = 0$ )	$V_{EB} = 7$ V		1	mA
$V_{CEV(sus)}^*$	Collector-emitter sustaining voltage ( $V_{BE} = -1.5$ V)	$I_C = 100$ mA		70	V
					V
$V_{CEO(sus)}^*$	Collector-emitter sustaining voltage ( $I_B = 0$ )	$I_C = 200$ mA		60	V
$V_{CE(sat)}^*$	Collector-emitter saturation voltage	$I_C = 4$ A	$I_B = 400$ mA		V
					V
				1	V
				3	V
$V_{BE}^*$	Base-emitter voltage	$I_C = 4$ A	$V_{CE} = 4$ V	1.5	V

MECHANICAL DATA



NJ Semi-Conductors reserves the right to change test conditions, parameter limits and package dimensions without notice. Information furnished by NJ Semi-Conductors is believed to be both accurate and reliable at the time of going to press. However NJ Semi-Conductors assumes no responsibility for any errors or omissions discovered in its use. NJ Semi-Conductors encourages customers to verify that data sheets are current before placing orders.