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2N3033

SILICON NPN SWITCHING TRANSISTOR

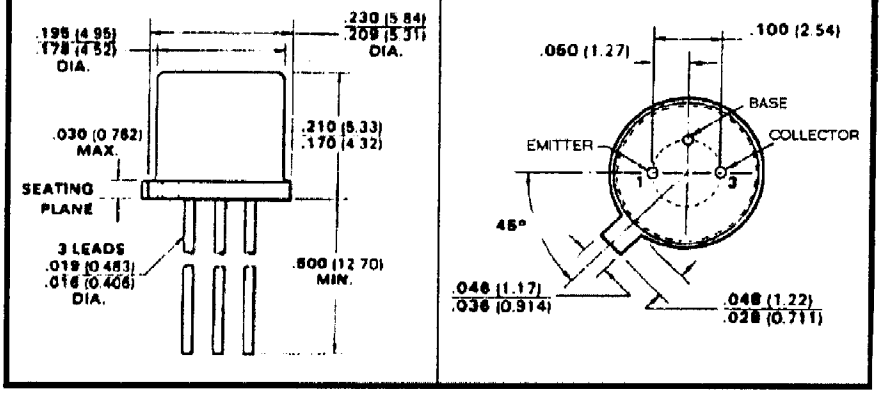
DESCRIPTION:

The **2N3033** is Designed for Avalanche-Mode Very Fast Switching Applications.

MAXIMUM RATINGS

I_C	200 mA
V_{CE}	100 V
P_{DISS}	1.0 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	175 °C/W

PACKAGE STYLE TO-18



CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	I_C = 1.0 mA			100		160	V
BV_{CER}	I_C = 1.0 mA	R_{BE} = 100 Ω		100		150	V
BV_{EBO}	I_E = 10 μA			4.0			V
I_{EBO}	V_{EB} = 3.0 V					1.0	μA
I_{CBO}	V_{CB} = 105 V					5.0	μA
I_{CER}	V_{CE} = 90 V	R_{BE} = 100 Ω	T_A = 25 °C T_A = 125 °C			5.0 50	μA
$I_{CES(H)}$				2.0			mA
$I_{CER(H)}$		R_{BE} = 100 Ω		1.5			mA
$V_{CE(SAT)}$	I_C = 100 mA	I_B = 20 mA				1.0	V
$V_{BE(SAT)}$	I_C = 100 mA	I_B = 20 mA				1.5	V
C_{ob}	V_{CB} = 10 V		f = 140 KHz			8.0	pF
C_{ib}	V_{EB} = 1.0 V		f = 140 KHz			20	pF
t_d	V_{CC} = 200 V					3.0	nS
t_r	V_{CC} = 200 V					2.0	nS
V_o	V_{CC} = 200 V					45	V