

2N3033

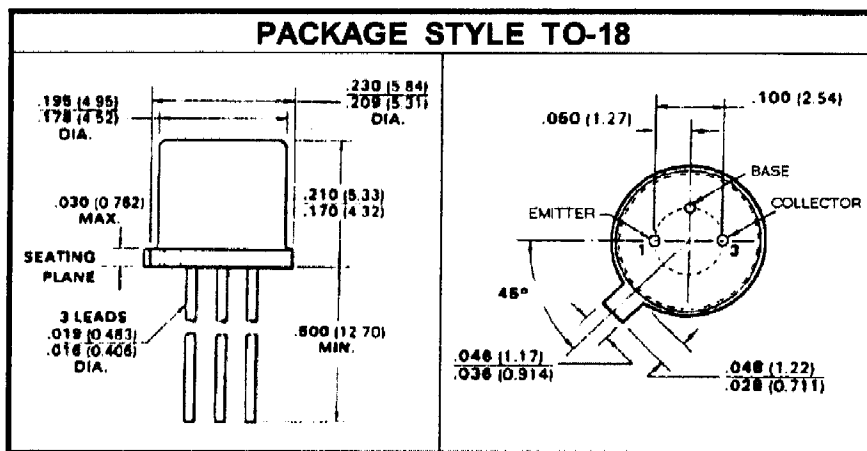
SILICON NPN SWITCHING TRANSISTOR

DESCRIPTION:

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

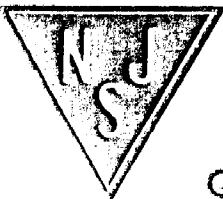
MAXIMUM RATINGS

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



CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CBO}	$I_C = 1.0$ mA	100		160	V
BV_{CER}	$I_C = 1.0$ mA $R_{BE} = 100 \Omega$	100		150	V
BV_{EBO}	$I_E = 10$ μ A	4.0			V
I_{EBO}	$V_{EB} = 3.0$ V			1.0	μ A
I_{CBO}	$V_{CB} = 105$ V			5.0	μ A
I_{CER}	$V_{CE} = 90$ V $R_{BE} = 100 \Omega$ $T_A = 25^\circ C$ $T_A = 125^\circ C$			5.0 50	μ A
$I_{CES(H)}$		2.0			mA
$I_{CER(H)}$	$R_{BE} = 100 \Omega$	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



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