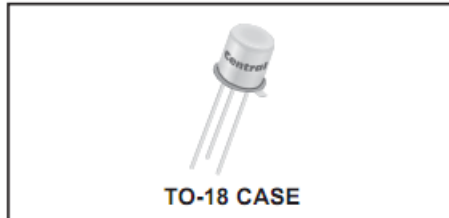


2N2369A
NPN SILICON TRANSISTOR



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR 2N2369A is an epitaxial planar NPN Silicon Transistor designed for ultra high speed saturated switching applications.

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Collector-Base Voltage
Collector-Emitter Voltage
Collector-Emitter Voltage
Emitter-Base Voltage
Continuous Collector Current
Peak Collector Current
Power Dissipation
Power Dissipation ($T_C=25^\circ\text{C}$)
Operating and Storage Junction Temperature
Thermal Resistance
Thermal Resistance

SYMBOL		UNITS
V_{CB0}	40	V
V_{CES}	40	V
V_{CEO}	15	V
V_{EBO}	4.5	V
I_C	200	mA
I_{CM}	500	mA
P_D	360	mW
P_D	1.2	W
T_J, T_{stg}	-65 to +200	$^\circ\text{C}$
θ_{JA}	486	$^\circ\text{C/W}$
θ_{JC}	146	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CB0}	$V_{CB}=20\text{V}$		400	nA
I_{CB0}	$V_{CB}=20\text{V}, T_A=150^\circ\text{C}$		30	μA
BV_{CB0}	$I_C=10\mu\text{A}$	40		V
BV_{CES}	$I_C=10\mu\text{A}$	40		V
BV_{CEO}	$I_C=10\text{mA}$	15		V
BV_{EBO}	$I_E=10\mu\text{A}$	4.5		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		200	mV
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}, T_A=125^\circ\text{C}$		300	mV
$V_{CE(SAT)}$	$I_C=30\text{mA}, I_B=3.0\text{mA}$		250	mV
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		500	mV
$V_{BE(SAT)}$	$I_C=10\text{mA}, I_B=1.0\text{mA}$	700	850	mV
$V_{BE(SAT)}$	$I_C=30\text{mA}, I_B=3.0\text{mA}$		1.15	V
$V_{BE(SAT)}$	$I_C=100\text{mA}, I_B=10\text{mA}$		1.6	V
h_{FE}	$V_{CE}=0.35\text{V}, I_C=10\text{mA}$	40	120	
h_{FE}	$V_{CE}=0.35\text{V}, I_C=10\text{mA}, T_A=-55^\circ\text{C}$	20		
h_{FE}	$V_{CE}=0.4\text{V}, I_C=30\text{mA}$	30		
h_{FE}	$V_{CE}=1.0\text{V}, I_C=100\text{mA}$	20		