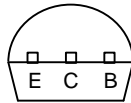


## Features

- High DC Current Gain and excellent  $h_{FE}$  Linearity  
 $h_{FE(1)} = 140-600$  ( $V_{CE}=1.0V, I_C=0.5A$ )  
 $h_{FE(2)} = 70$  (Min.), 200 (Typ.) ( $V_{CE}=1.0V, I_C=2.0A$ )

Pin Configuration  
Bottom View



## NPN Silicon Epitaxial Transistors

## Maximum Ratings

Symbol	Rating	Rating	Unit
$V_{CEO}$	Collector-Emitter Voltage	10	V
$V_{CES}$	Collector-Emitter Voltage	30	V
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{EBO}$	Emitter-Base Voltage	6.0	V
$I_C$	Collector Current - DC	2.0	A
	Pulsed <sup>(1)</sup>	5.0	A
$I_B$	Base Current	0.2	A
$P_C$	Collector power dissipation	750	mW
$T_J$	Junction Temperature	-55 to +150	°C
$T_{STG}$	Storage Temperature	-55 to +150	°C

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Typ	Max	Units
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### OFF CHARACTERISTICS

$V_{(BR)CEO}$	Collector-Emitter Voltage ( $I_C=10mA, I_B=0$ )	10	---	---	Vdc
$V_{(BR)EBO}$	Collector-Emitter Voltage ( $I_E=1.0mA, I_C=0$ )	6.0	---	---	Vdc
$I_{CBO}$	Collector Cutoff Current ( $V_{CB}=30Vdc, I_E=0$ )	---	---	0.1	uAdc
$I_{EBO}$	Emitter Cutoff Current ( $V_{EB}=6.0Vdc, I_C=0$ )	---	---	0.1	uAdc

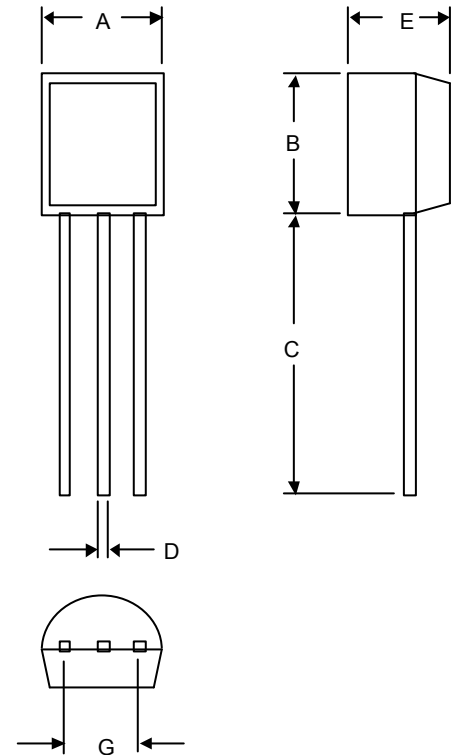
### ON CHARACTERISTICS

$h_{FE(1)}$	DC Current Gain <sup>(2)</sup> ( $I_C=0.5Adc, V_{CE}=1.0Vdc$ )	140	---	600	---
$h_{FE(2)}$	DC Current Gain ( $I_C=2.0Adc, V_{CE}=1.0Vdc$ )	70	200	---	---
$V_{CE(sat)}$	Collector Saturation Voltage ( $I_C=2.0Adc, I_B=50mA$ )	---	0.2	0.5	Vdc
$V_{BE}$	Base Saturation Voltage ( $I_C=2.0Adc, V_{CE}=1.0Vdc$ )	---	0.86	1.5	Vdc
$f_T$	Transition Frequency ( $V_{CE}=1.0Vdc, I_C=0.5Adc$ )	100	150	---	MHz
$C_{ob}$	Collector Output Capacitance ( $V_{CB}=10Vdc, I_E=0, f=1.0MHz$ )	---	27	---	pF

(1) Pulse Width=10 ms (Max.), Duty Cycle=30% (Max.)

(2)  $h_{FE(1)}$  Classification L: 140-240, M: 200-330, N: 300-450, P: 420-600

## TO-92



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.170	.190	4.33	4.83	
B	.170	.190	4.30	4.83	
C	.550	.590	13.97	14.97	
D	.010	.020	0.36	0.56	
E	.130	.160	3.30	3.96	
G	.010	.104	2.44	2.64	

# 2SC3279

