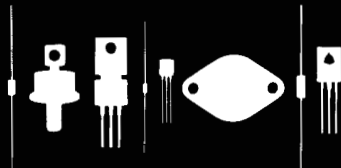


145 Adams Avenue
Hauppauge, New York 11788
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2N6428
2N6429

NPN SILICON TRANSISTOR

JEDEC TO-92 CASE (EBC)

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6428, 2N6429 types are NPN Silicon Transistors manufactured by the epitaxial planar process, designed for high gain amplifier applications.

MAXIMUM RATINGS (T_A = 25°C)

	SYMBOL	2N6428	2N6429	UNITS
Collector-Base Voltage	V _{CBO}	60	55	V
Collector-Emitter Voltage	V _{CEO}	50	45	V
Emitter-Base Voltage	V _{EBO}	6.0		V
Collector Current	I _C	200		mA
Power Dissipation	P _D	625		mW
Power Dissipation (T _C = 25°C)	P _D	1.5		W
Operating and Storage				
Junction Temperature	T _J , T _{stg}	-65 to +150		°C
Thermal Resistance	Θ _{JA}	200		°C/W
Thermal Resistance	Θ _{JC}	83.3		°C/W

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	2N6428		2N6429		UNITS
		MIN	MAX	MIN	MAX	
I _{CBO}	V _{CB} = 30V		10		10	nA
I _{CEO}	V _{CE} = 30V		25		25	nA
I _{EBO}	V _{BE} = 5.0V		10		10	nA
BV _{CBO}	I _C = 100μA	60		55		V
BV _{CEO}	I _C = 1.0mA	50		45		V
V _{CE(SAT)}	I _C = 10mA, I _B = 0.5mA		0.20		0.20	V
V _{CE(SAT)}	I _C = 100mA, I _B = 5.0mA		0.60		0.60	V
V _{BE(ON)}	V _{CE} = 5.0V, I _C = 1.0mA	0.56	0.66	0.56	0.66	V
h _{FE}	V _{CE} = 5.0V, I _C = 10μA	250		500		
h _{FE}	V _{CE} = 5.0V, I _C = 100μA	250	650	500	1250	
h _{FE}	V _{CE} = 5.0V, I _C = 1.0mA	250		500		
h _{FE}	V _{CE} = 5.0V, I _C = 10mA	250		500		
f _T	V _{CE} = 5.0V, I _C = 1.0mA, f = 100MHz	100	700	100	700	MHz
C _{ob}	V _{CB} = 10V, I _E = 0, f = 1.0MHz		3.0		3.0	pF
C _{ib}	V _{BE} = 0.5V, I _C = 0, f = 1.0MHz		8.0		8.0	pF
h _{ie}	V _{CE} = 5.0V, I _C = 1.0mA, f = 1.0kHz	3.0	30	6.0	60	kΩ
h _{re}	V _{CE} = 5.0V, I _C = 1.0mA, f = 1.0kHz	2.0	20	5.0	50	X 10 ⁻⁴
h _{fe}	V _{CE} = 5.0V, I _C = 1.0mA, f = 1.0kHz	200	800	400	1600	
h _{oe}	V _{CE} = 5.0V, I _C = 1.0mA, f = 1.0kHz	5.0	50	10	100	μmhos

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