Data Sheet

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Manufacturers of World Class Discrete Semiconductors

2N6716 2N6717 2N6718 NPN
2N6728 2N6729 2N6730 PNP

COMPLEMENTARY SILICON POWER TRANSISTORS

JEDEC TO-237 (EBC) CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6716, 2N6728 Series types are Complementary Silicon Plastic Power Transistors designed for general purpose power amplifier and switching applications

MAXIMUM RATINGS (T_A=25°C unless otherwise noted)

	SYMBOL	2N6716 2N6728	2N6717 2N6729	2N6718 2N6730	UNIT
Collector-Base Voltage	V_{CBO}	60	80	100	V
Collector-Emitter Voltage	V_{CEO}	60	80	100	V
Emitter-Base Voltage	V_{EBO}		5.0		V
Collector Current	I_C		2.0		A
Base Current	I_B		0.5		A
Power Dissipation	P_D		1.0		W
Power Dissipation (T_C=25°C)	P_D		2.0		W
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 TO +150		°C
Thermal Resistance	θ_{JA}		125		°C/W
Thermal Resistance	θ_{JC}		62.5		°C/W

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	V_{CB}=Rated V_{CBO}		0.1	μA
I_{EBO}	V_{EB}=Rated V_{EBO}		10	μA
BV_{CBO}	I_C=0.1mA (2N6716, 2N6728)	60		V
BV_{CBO}	I_C=0.1mA (2N6717, 2N6729)	80		V
BV_{CBO}	I_C=0.1mA (2N6718, 2N6730)	100		V
BV_{CEO}	I_C=1.0mA (2N6716, 2N6728)	60		V
BV_{CEO}	I_C=1.0mA (2N6717, 2N6729)	80		V
BV_{CEO}	I_C=1.0mA (2N6718, 2N6730)	100		V
BV_{EBO}	I_E=0.1mA	5.0		V
$V_{CE(SAT)}$	I_C=250mA, I_B=10mA		0.5	V
$V_{BE(ON)}$	V_{CE}=1.0V, I_C=250mA		1.2	V
h_{FE}	V_{CE}=1.0V, I_C=50mA	80		
h_{FE}	V_{CE}=1.0V, I_C=250mA	50	250	
f_T	V_{CE}=5.0V, I_C=200mA, f=20MHz	50	500	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		30	pF