Data Sheet

Central™
Semiconductor Corp.
145 Adams Avenue, Hauppauge, NY 11788 USA
Tel: (631) 435-1110 • Fax: (631) 435-1824

Manufacturers of World Class Discrete Semiconductors

2N6714 2N6715 NPN
2N6726 2N6727 PNP

COMPLEMENTARY SILICON
POWER TRANSISTOR

JEDEC TO-237 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6714, 2N6726 series types are complementary Silicon Plastic Power Transistors desgined for general purpose power amplifier and switching applications.

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

	SYMBOL	2N6714 2N6726	2N6715 2N6727	UNIT
Collector-Base Voltage	V_{CBO}	40	50	V
Collector-Emitter Voltage	V_{CEO}	30	40	V
Emitter-Base Voltage	V_{EBO}	5.0	5.0	V
Collector Current	I_C	2.0	2.0	A
Base Current	I_B	0.5	0.5	A
Power Dissipation	P_D	1.0	1.0	W
Power Dissipation (T_C=25°C)	P_D	2.0	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 unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
I_{CBO}	V_{CB}=Rated V_{CBO}		0.1	μA
I_{EBO}	V_{EB}=Rated V_{EBO}		0.1	μA
BV_{CBO}	I_C=1.0mA (2N6714, 2N6726)	40		V
BV_{CBO}	I_C=1.0mA (2N6715, 2N6727)	50		V
BV_{CEO}	I_C=10mA (2N6714, 2N6726)	30		V
BV_{CEO}	I_C=10mA (2N6715, 2N6727)	40		V
BV_{EBO}	I_E=1.0mA	5.0		V
$V_{CE(SAT)}$	I_C=1.0A, I_B=0.1A		0.5	V
$V_{BE(ON)}$	V_{CE}=1.0V, I_C=1.0A		1.2	V
h_{FE}	V_{CE}=1.0V, I_C=0.1A	60		
h_{FE}	V_{CE}=1.0V, I_C=1.0A	50	250	
f_T	V_{CE}=10V, I_C=50mA, f=20MHz	50	500	MHz
C_{ob}	V_{CB}=10V, I_E=0, f=1.0MHz		30	pF