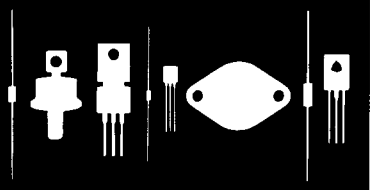
Central
Semiconductor Corp.
145 Adams Avenue
Hauppauge, New York 11788



2N6473 2N6474 NPN
2N6475 2N6476 PNP

COMPLEMENTARY SILICON
SWITCHING TRANSISTORS

JEDEC TO-220 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6473 Series types are complementary silicon power transistors manufactured by the epitaxial base process designed for general purpose amplifier and switching applications.

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

	SYMBOL	2N6473 2N6475	2N6474 2N6476	UNIT
Collector-Base Voltage	V_{CBO}	110	130	V
Collector-Emitter Voltage (R_{BE}=100Ω)	V_{CER}	110	130	V
Collector-Emitter Voltage	V_{CEO}	100	120	V
Emitter-Base Voltage	V_{EBO}	5.0		V
Collector Current	I_C	4.0		A
Base Current	I_B	2.0		A
Power Dissipation	P_D	40		W
Operating and Storage Junction Temperature	T_J, Tstg	-65 TO +150		°C
Thermal Resistance	ΘJC	3.125		°C/W

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

		2N6473 2N6475		2N6474 2N6476		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNIT
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{BE}=1.5V		0.1		0.1	mA
I_{CEV}	V_{CE}=Rated V_{CEO}, V_{BE}=1.5V, T_C=100°C		2.0		2.0	mA
I_{CER}	V_{CE}=Rated V_{CER}, R_{BE}=100Ω		0.1		0.1	mA
I_{CER}	V_{CE}=Rated V_{CER}, R_{BE}=100Ω, T_C=100°C		2.0		2.0	mA
I_{CEO}	V_{CE}=½ Rated V_{CEO}		1.0		1.0	mA
I_{EBO}	V_{BE}=5.0V		1.0		1.0	mA
BV_{CEO}	I_C=100mA	100		120		V
BV_{CER}	I_C=100mA, R_{BE}=100Ω	110		130		V
$V_{CE(SAT)}$	I_C=1.5A, I_B=0.15A		1.2		1.2	V
$V_{CE(SAT)}$	I_C=4.0A, I_B=2.0A		2.5		2.5	V
$V_{BE(ON)}$	V_{CE}=4.0V, I_C=1.5A		2.0		2.0	V
$V_{BE(ON)}$	V_{CE}=2.5V, I_C=4.0A		3.5		3.5	V
h_{FE}	V_{CE}=4.0V, I_C=1.5A	15	150	15	150	
h_{FE}	V_{CE}=2.5V, I_C=4.0A	2.0		2.0		
h_{fe}	V_{CE}=4.0V, I_C=0.5A, f=50kHz	20		20		
f_T	V_{CE}=4.0V, I_C=0.5A (2N6473, 2N6474)	4.0		4.0		MHz
f_T	V_{CE}=4.0V, I_C=0.5A (2N6475, 2N6476)	5.0		5.0		MHz
C_{ob}	V_{CB}=10V, f=1.0MHz		250		250	pF

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