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2N4904 THRU 2N4906 PNP
2N4913 THRU 2N4915 NPN

COMPLEMENTARY SILICON POWER TRANSISTORS

JEDEC TO-3 CASE

	SYMBOL	2N4904 2N4913	2N4905 2N4914	2N4906 2N4915	UNIT
Collector-Base Voltage	V_{CBO}	40	60	80	V
Collector-Emitter Voltage	V_{CEO}	40	60	80	V
Emitter-Base Voltage	V_{EBO}		5.0		V
Collector Current	I_C		5.0		A
Base Current	I_B		1.0		A
Power Dissipation	P_D		87.5		W
Operating and Storage Junction Temperature	T_J, T_{STG}		-65 to +200		°C
Thermal Resistance	Θ_{JC}		2.0		°C/W

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

		PNP TYPES		NPN TYPES		
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	UNIT
I_{CBO}	V_{CB}=Rated V_{CBO}		0.1		1.0	mA
I_{CEO}	V_{CE}=Rated V_{CEO}		1.0		1.0	mA
I_{CEV}	V_{CE}=Rated V_{CEO}, $V_{BE(OFF)}$=1.5V		0.1		1.0	mA
I_{CEV}	V_{CE}=Rated V_{CEO}, $V_{BE(OFF)}$=1.5V, T_C=150°C		2.0		2.0	mA
I_{EBO}	V_{BE}=5.0V		1.0		1.0	mA
BV_{CEO}	I_C=0.2A (2N4904, 2N4913)	40		40		V
BV_{CEO}	I_C=0.2A (2N4905, 2N4914)	60		60		V
BV_{CEO}	I_C=0.2A (2N4906, 2N4915)	80		80		V
$V_{CE(SAT)}$	I_C=2.5A, I_B=250mA		1.0		1.0	V
$V_{CE(SAT)}$	I_C=5.0A, I_B=1.0A		1.5		1.5	V
$V_{BE(ON)}$	V_{CE}=2.0V, I_C=2.5A		1.4		1.4	V
h_{FE}	V_{CE}=2.0V, I_C=2.5A	25	100	25	100	
h_{FE}	V_{CE}=2.0V, I_C=5.0A	7.0	-	7.0	-	
h_{fe}	V_{CE}=10V, I_C=500mA, f=1.0kHz	40	-	20	-	
f_T	V_{CE}=10V, I_C=1.0A, f=1.0MHz	4.0		4.0		MHz