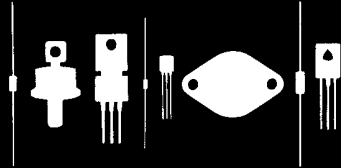


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145 Adams Avenue
Hauppauge, New York 11788



2N6515 2N6516 2N6517 NPN
2N6518 2N6519 2N6520 PNP

COMPLEMENTARY SILICON
HIGH VOLTAGE TRANSISTORS

JEDEC TO-92 CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N6515 (NPN), 2N6518 (PNP) Series types are molded epoxy complementary silicon transistors designed for high voltage driver and amplifier applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL	2N6515 2N6518	2N6516 2N6519	2N6517 2N6520	UNIT
Collector-Base Voltage	V _{CB0}	250	300	350	V
Collector-Emitter Voltage	V _{CEO}	250	300	350	V
Emitter-Base Voltage (NPN ONLY)	V _{EB0}	6.0	6.0	6.0	V
Emitter-Base Voltage (PNP ONLY)	V _{EBO}	5.0	5.0	5.0	V
Collector-Current	I _C	500	500	500	mA
Base Current	I _B	250	250	250	mA
Power Dissipation	P _D	625	625	625	mW
Operating and Storage Junction Temperature	T _J , T _{stg}	-65 TO +150			°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

SYMBOL	TEST CONDITIONS	2N6515 2N6518		2N6516 2N6519		2N6517 2N6520		UNIT
		MIN	MAX	MIN	MAX	MIN	MAX	
I _{CB0}	V _{CB} =150V		50					nA
I _{CB0}	V _{CB} =200V		-		50		-	nA
I _{CB0}	V _{CB} =250V		-		-		50	nA
I _{EBO}	V _{EB} =5.0V (NPN ONLY)		50		50		50	nA
I _{EBO}	V _{EB} =4.0V (PNP ONLY)		50		50		50	nA
BV _{CB0}	I _C =100μA	250		300		350		V
BV _{CEO}	I _C =1.0mA	250		300		350		V
BV _{EBO}	I _C =10μA (NPN ONLY)	6.0		6.0		6.0		V
BV _{EBO}	I _C =10μA (PNP ONLY)	5.0		5.0		5.0		V
V _{CE(SAT)}	I _C =10mA, I _B =1.0mA		0.30		0.30		0.30	V
V _{CE(SAT)}	I _C =20mA, I _B =2.0mA		0.35		0.35		0.35	V
V _{CE(SAT)}	I _C =30mA, I _B =3.0mA		0.50		0.50		0.50	V
V _{CE(SAT)}	I _C =50mA, I _B =5.0mA		1.0		1.0		1.0	V
V _{BE(SAT)}	I _C =10mA, I _B =1.0mA		0.75		0.75		0.75	V
V _{BE(SAT)}	I _C =20mA, I _B =2.0mA		0.85		0.85		0.85	V
V _{BE(SAT)}	I _C =30mA, I _B =3.0mA		0.90		0.90		0.90	V
V _{BE(ON)}	V _{CE} =10V, I _C =100mA		2.0		2.0		2.0	V
h _{FE}	V _{CE} =10V, I _C =1.0mA	35		30		20		-
h _{FE}	V _{CE} =10V, I _C =10mA	50		45		30		-
h _{FE}	V _{CE} =10V, I _C =30mA	50	300	45	270	30	200	-
h _{FE}	V _{CE} =10V, I _C =50mA	45	220	40	200	20	100	-
h _{FE}	V _{CE} =10V, I _C =100mA	25		20		15		-
f _T	V _{CE} =20V, I _C =10mA, f=20MHz	40	200	40	200	40	200	MHz
C _{cb}	V _{CE} =20V, I _C =10mA, f=20MHz		6.0		6.0		6.0	pF
C _{eb}	V _{EB} =0.5V, f=1.0MHz (NPN ONLY)		80		80		80	pF
C _{eb}	V _{EB} =0.5V, f=1.0MHz (PNP ONLY)		100		100		100	pF
t _{on}	V _{CC} =100V, V _{BE(OFF)} =2.0V, I _C =50mA, I _{B1} =10mA		200		200		200	ns
t _{off}	V _{CC} =100V, I _C =50mA, I _{B1} =I _{B2} =10mA		3.5		3.5		3.5	μs

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