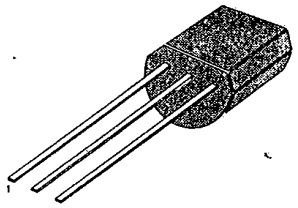
2N6518 PNP EPITAXIAL SILICON TRANSISTOR

T-29-21

HIGH VOLTAGE TRANSISTOR

TO-92



1. Emitter 2. Base 3. Collector

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	−250	V
Collector-Emitter Voltage	V_{CEO}	−250	V
Emitter-Base Voltage	V_{EBO}	−5	V
Collector Current	I_C	−500	mA
Base Current	I_B	−250	mA
Collector Dissipation	P_C	0.625	W
Derate above 25°C		5	mW/°C
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	−55~150	°C

• Refer to 2N6520 for graphs

ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector Base Breakdown Voltag	BV_{CBO}	I_C=−100μA, I_E=0	−250		V
*Collector Emitter Breakdown Voltage	BV_{CEO}	I_C=−1mA, I_B=0	−250		V
Emitter Base Breakdown Voltage	BV_{EBO}	I_E=−10μA, I_C=0	−5		V
Collector Cutoff Current	I_{CBO}	V_{CB}=−150V, I_E=0		−50	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=−4V, I_C=0		−50	nA
*DC Current Gain	h_{FE}	V_{CE}=−10V, I_C=−1mA	35		
		V_{CE}=−10V, I_C=−10mA	50		
		V_{CE}=−10V, I_C=−30mA	50	300	
		V_{CE}=−10V, I_C=−50mA	45	220	
		V_{CE}=−10V, I_C=−100mA	25		
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=−10mA, I_B=−1mA		−0.30	V
		I_C=−20mA, I_B=−2mA		−0.35	V
		I_C=−30mA, I_B=−3mA		−0.50	V
		I_C=−50mA, I_B=−5mA		−1	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=−10mA, I_B=−1mA		−0.75	V
		I_C=−20mA, I_B=−2mA		−0.85	V
		I_C=−30mA, I_B=−3mA		−0.90	V
Base Emitter On Voltage	V_{BE} (on)	V_{CE}=−10V, I_C=−100mA		−2	V
*Current Gain Bandwidth Product	f_T	V_{CE}=−20V, I_C=−10mA, f=20MHz	40	200	MHz
Collector Base Capacitance	Ccb	V_{CB}=−20V, I_E=0, f=1MHz		6	pF
Emitter Base Capacitance	Ceb	V_{EB}=−0.5V, I_C=0, f=1MHz		100	pF
Turn On Time	ton	V_{BE} (off)=−2V, V_{CC}=−100V I_C=−50mA, I_{B1}=−10mA		200	ns
Turn Off Time	toff	V_{CC}=−100V, I_C=−50mA I_{B1}=I_{B2}=−10mA		3.5	ns

* Pulse Test: PW≤300μs, Duty Cycle≤2%