

NPN EPITAXIAL SILICON TRANSISTOR

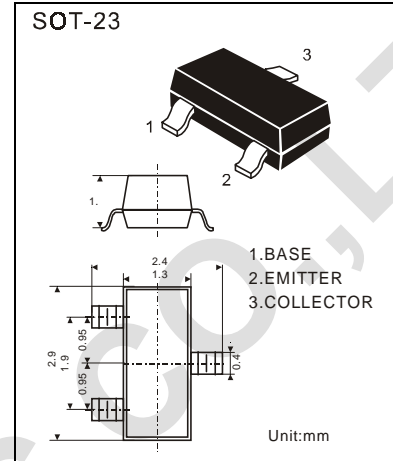
HIGH VOLTAGE TRANSISTOR

* Collector Dissipation: $P_c=225mW(T_a=25^{\circ}C)$

* Collector-Emitter Voltage : $V_{ce0}=350V$

ABSOLUTE MAXIMUM RATINGS at $T_a=25^{\circ}C$

Characteristic	Symbol	Rating	
Collector-Base Voltage	Vcbo	350	V
Collector-Emitter Voltage	Vceo	350	V
Emitter-Base Voltage	Vebo	6	V
Collector Current	Ic	500	mA
Base Current	Ib	250	mA
Collector Dissipation $T_a=25^{\circ}C^*$	P _D	225	mW
Junction Temperature	T _j	150	°C
Storage Temperature	T _{stg}	-55-150	°C



ELECTRICAL CHARACTERISTICS at $T_a=25^{\circ}C$

Characteristic	Symbol	Min	Typ	Max	Unit	Test Conditions
Collector-Base Breakdown Voltage	BVcbo	350			V	Ic=100uA Ie=0
Collector-Emitter Breakdown Voltage#	Bvceo	350			V	Ic= 1mA Ib=0
Emitter-Base Breakdown Voltage	BVebo	6			V	Ie= 10uA Ic=0
Collector Cutoff Current	Icbo			50	nA	Vcb= 250V Ie=0
Emitter Cutoff Current	Iebo			50	nA	Veb=5V Ic=0
DC Current Gain	Hfe1	20				Vce=10V Ic=1mA
DC Current Gain	Hfe2	30				Vce=10V Ic=10mA
DC Current Gain	Hfe3	30		200		Vce=10V Ic=30mA
DC Current Gain	Hfe4	20		200		Vce=10V Ic=50mA
DC Current Gain	Hfe5	15				Vce=10V Ic=100mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.3	V	Ic=10mA Ib=1mA
Collector-Emitter Saturation Voltage	Vce(sat)			0.5	V	Ic=30mA Ib=3mA
Base-Emitter Saturation Voltage	Vbe(sat)			0.75	V	Ic=10mA Ib=1mA
Base-Emitter Saturation Voltage	Vbe(sat)			0.9	V	Ic=30mA Ib=3mA
Base-Emitter On Voltage	Vbe(on)			2	V	Vce=10V Ic=100mA
Current Gain Bandwidth Product	f _T	40		200	MHz	Vce=20V Ic=10mA F=20MHz
Collect Base Capacitance	Ccb			6	PF	Vcb=20V Ie=0 f=1MHz
Emitter Base Capacitance	Ceb			80	PF	Veb=0.5V f=1.00MHz

* Total Device Dissipation : FR=1x0.75x0.062in Board,Derate 25°C.

Pulse Test : Pulse Width ≤300uS,Duty cycle≤2%

DEVICE MARKING: MMBT6517LT=1Z