



NPN EPITAXIAL SILICON TRANSISTORS

WMBT3904

High Voltage Transistor

SOT—23

- ◆ Power Dissipation: 225mW
- ◆ Collector Current: Max. 0.2A



1. BASE
2. EMITTER
3. COLLECTOR

GUARANTEED PROBED CHARACTERISTICS (T_A=25°C)

Characteristic	Symbol	Test Conditions	Limits		Units
			MIN.	MAX.	
Collector-emitter Breakdown Voltage	BV _{CEO}	I _C =1mA	40		V
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =100μA	60		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA	6.0		V
Collector Cut-off Current	I _{CEX}	V _{CE} =30V, V _{BE} =3V		50	nA
DC Current Gain	h _{FE1}	V _{CE} =1V, I _C =100μA	40		
	h _{FE2}	V _{CE} =1V, I _C =1mA	70		
	h _{FE3}	V _{CE} =1V, I _C =10mA	100	300	
	h _{FE4}	V _{CE} =1V, I _C =50mA	60		
	h _{FE5}	V _{CE} =1V, I _C =100mA	30		
Base-Emitter Saturation Voltage	BV _{ESAT1}	I _C =10mA, I _B =1mA	650	850	mV
	BV _{ESAT2}	I _C =50mA, I _B =5mA		950	mV
Collector-Emitter Saturation Voltage	V _{CE(SAT)1}	I _C =10mA, I _B =1mA		200	mV
	V _{CE(SAT)2}	I _C =50mA, I _B =5mA		200	mV
Transition Frequency	f _T	I _C =10, V _{CE} =20V f=100MHz	300		MHz
Collector-Base Capacitance	C _{OB}	V _{CB} =5V, f=1MHz		4	PF

NOTES: Due to probe testing limitations, only the DC parameters are tested.