



NPN EPITAXIAL SILICON TRANSISTORS

WMBTA42

High Voltage Transistor * Die Size 0.6*0.6mm * Power Dissipation: 225mW * Collector Current: Max. 500mA * Bonding Pad Size Emitoe 100*100mkm Base 100*100mkm			SOT—23  1. BASE 2. EMITTER 3. COLLECTOR			
GUARANTEED PROBED CHARACTERISTICS (T_A=25°C)						
Characteristic	Symbol	Test Conditions	Limits			Units
			Min	Typ	Max	
Collector-emitter Breakdown Voltage	V _{CEO}	I _C =1.0mA	300	-	-	V
Collector-Base Breakdown Voltage	V _{CBO}	I _C =100uA	300	-	-	V
Collector Cut-off Current	I _{CBO}	V _{CB} =260V	-	-	100	nA
Emitter Cut-off Current	I _{EBO}	V _{EB} =6V	-	-	100	nA
DC Current Gain	h _{FE}	V _{CE} =10V, I _C =1mA V _{CE} =10V, I _C =10mA V _{CE} =10V, I _C =30mA	30 40 40	-	-	
Base-Emitter Saturation Voltage	V _{BEsat}	I _C =20mA, I _b =2mA	-	-	0.90	V
Collector-Emitter Saturation Voltage	V _{CEsat}	I _C =20mA, I _B =2mA	-	-	0.35	V
Transition Frequency	f _r	V _{CE} =20V, I _C =10mA, f=10MHz	50	-	-	MHz
Collector-Base Capacitance	C _{cb}	V _{CB} =20V, f=1MHz	-	-	3.0	pF
NOTES: Due to probe testing limitations, only the DC parameters are tested.						