

MMBTA05**NPN EPITAXIAL SILICON TRANSISTOR****DRIVER TRANSISTOR****ABSOLUTE MAXIMUM RATINGS (T_a = 25°C)**

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V _{CB0}	60	V
Collector-Emitter Voltage	V _{CE0}	60	V
Emitter-Base Voltage	V _{EB0}	4	V
Collector Current (max)	I _C	500	mA
Collector Dissipation	P _C	350	mW
Storage Temperature	T _{stg}	150	°C
Thermal Resistance Junction to Ambient	R _{th(j-a)}	357	°C/W

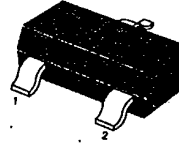
- Refer to MPSA05 for graphs

ELECTRICAL CHARACTERISTICS (T_a = 25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
* Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = 1mA, I _B = 0	60		V
Emitter-Base Breakdown Voltage	BV _{EB0}	I _E = 100μA, I _C = 0	4		V
Collector Cutoff Current	I _{CB0}	V _{CB} = 60V, I _E = 0		0.1	μA
Collector Cutoff Current	I _{CEO}	V _{CE} = 60V, I _B = 0		0.1	μA
DC Current Gain	h _{FE}	V _{CE} = 1V, I _C = 10mA	50		
		V _{CE} = 1V, I _C = 100mA	50		
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _C = 100mA, I _B = 10mA		0.25	V
Base-Emitter On Voltage	V _{BE(on)}	V _{CE} = 1V, I _C = 100mA		1.2	V
Current Gain-Bandwidth Product	f _T	V _{CE} = 2V, I _C = 10mA, f = 100MHz	100		MHz

- * Pulse Test: PW ≤ 300μs, Duty Cycle ≤ 2%

SOT-23



1. Base 2. Emitter 3. Collector

Marking

