

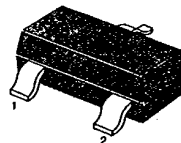
DRIVER TRANSISTOR

ABSOLUTE MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	50	V
Collector-Emitter Voltage	V_{CE0}	45	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	50	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

• Refer to MMBT5086 for graphs

SOT-23



1. Base 2. Emitter 3. Collector

ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CB0}	$I_C = 100\mu\text{A}$, $I_E = 0$	50		V
Collector-Emitter Breakdown Voltage	BV_{CE0}	$I_C = 1.0\text{mA}$, $I_B = 0$	45		V
Emitter-Base Breakdown Voltage	BV_{EB0}	$I_E = 10\mu\text{A}$, $I_C = 0$	5		V
Collector Cutoff Current	I_{CB0}	$V_{CB} = 40\text{V}$, $I_E = 0$		50	nA
Emitter Cutoff Current	I_{EB0}	$V_{EB} = 5.0\text{V}$, $I_C = 0$		50	nA
DC Current Gain	h_{FE}	$V_{CE} = 3\text{V}$, $I_C = 0.1\text{mA}$	150		
		$V_{CE} = 3\text{V}$, $I_C = 0.5\text{mA}$	450	900	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 20\text{mA}$, $I_B = 2.0\text{mA}$		0.3	V
Current Gain-Bandwidth Product	f_T	$I_C = 1.0\text{mA}$, $V_{CE} = 6.0\text{V}$ $f = 100\text{MHz}$	75		MHz

Marking

