

MMBT6429**NPN EPITAXIAL SILICON TRANSISTOR**

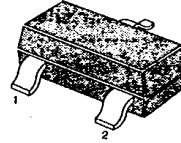
T-29-19

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

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CB0}	55	V
Collector-Emitter Voltage	V_{CE0}	45	V
Emitter-Base Voltage	V_{EB0}	6	V
Collector Current	I_C	200	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	T_{stg}	150	$^\circ\text{C}$

• Refer to MMBT5088 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_{CBO}	$I_C = 0.1\text{mA}, I_E = 0$	55		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 1.0\text{mA}, I_B = 0$	45		V
Collector Cutoff Current	I_{CBO}	$V_{CB} = 30\text{V}, I_E = 0$		0.01	μA
Collector Cutoff Current	I_{CEO}	$V_{CE} = 30\text{V}, I_B = 0$		0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB} = 5.0\text{V}, I_C = 0$		0.01	μA
DC Current Gain	h_{FE}	$V_{CE} = 5\text{V}, I_C = 0.01\text{mA}$	500		
		$V_{CE} = 5\text{V}, I_C = 0.1\text{mA}$	500	1250	
		$V_{CE} = 5\text{V}, I_C = 1.0\text{mA}$	500		
		$V_{CE} = 5\text{V}, I_C = 10\text{mA}$	500		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 10\text{mA}, I_B = 0.5\text{mA}$		0.2	V
		$I_C = 100\text{mA}, I_B = 5\text{mA}$		0.6	V
Base-Emitter On Voltage	$V_{BE(on)}$	$I_C = 1\text{mA}, V_{CE} = 5\text{V}$	0.56	0.66	V
Current Gain-Bandwidth Product	f_T	$I_C = 1.0\text{mA}, V_{CE} = 5\text{V}$ $f = 100\text{MHz}$	100	700	MHz
Output Capacitance	C_{ob}	$V_{CB} = 10\text{V}, I_E = 0$ $f = 1.0\text{MHz}$		3	pF

Marking

