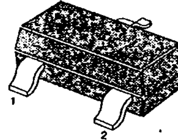
MMBT5550 NPN EPITAXIAL SILICON TRANSISTOR

T-29-19

HIGH VOLTAGE TRANSISTOR

SOT-23



1. Base 2. Emitter 3. Collector

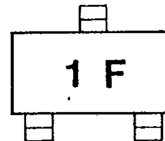
ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

Characteristic	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	140	V
Emitter-Base Voltage	V_{EBO}	6	V
Collector Current	I_C	600	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	Tstg	150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=10μA, I_E=0	160		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=1mA, I_B=0	140		V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E=10μA, I_C=0	6		V
Collector Cutoff Current	I_{CBO}	V_{CB}=100V, I_E=0		100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=4V, I_C=0		50	nA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=1.0mA	60		
		V_{CE}=5V, I_C=10mA	60	250	
		V_{CE}=5V, I_C=50mA	20		
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=10mA, I_B=1mA		0.15	V
		I_C=50mA, I_B=5mA		0.25	V
Base-Emitter Saturation Voltage	V_{BE} (sat)	I_C=10mA, I_B=1mA		1.0	V
		I_C=50mA, I_B=5mA		1.2	V
Current Gain-Bandwidth Product	f_T	I_C=10mA, V_{CE}=10V f=100MHz	100	300	MHz
Output Capacitance	Cob	V_{CB}=10V, I_E=0 f=1.0MHz		6.0	pF

Marking



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