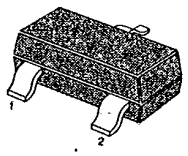
MMBTA14 NPN EPITAXIAL SILICON TRANSISTOR

T-29-29

DARLINGTON AMPLIFIER 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}	30	V
Collector-Emitter Voltage	V_{CES}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	300	mA
Collector Dissipation	P_C	350	mW
Storage Temperature	Tstg	150	°C

• Refer to MMBT6427 for graphs

3

ELECTRICAL CHARACTERISTICS (T_a=25°C)

Characteristic	Symbol	Test Condition	Min	Max	Unit
Collector-Emitter Breakdown Voltage	BV_{CES}	I_C=100μA, I_B=0	30		V
Collector Cutoff Current	I_{CBO}	V_{CB}=30V, I_E=0		100	nA
Emitter Cutoff Current	I_{EBO}	V_{EB}=10V, I_C=0		100	nA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=10mA	10,000		
		V_{CE}=5V, I_C=100mA	20,000		
Collector-Emitter Saturation Voltage	V_{CE} (sat)	I_C=100mA, I_B=0.1mA		1.5	V
Base-Emitter On Voltage	V_{BE}	I_C=100mA, V_{CE}=5V		2.0	V
Current Gain-Bandwidth Product	f_T	I_C=10mA, V_{CE}=5V f=100MHz	125		MHz

Marking