



MMBTA14

NPN SILICON TRANSISTOR

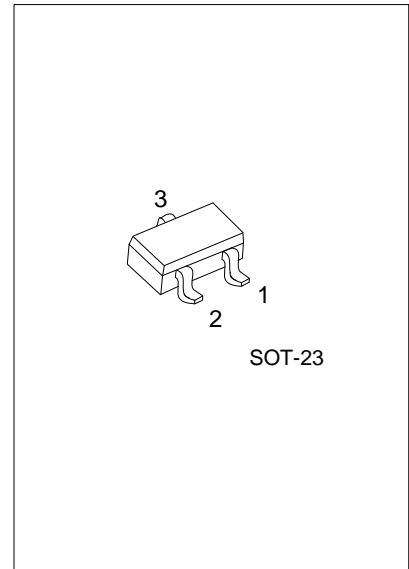
DARLINGTON TRANSISTOR

DESCRIPTION

The UTC **MMBTA14** is a Darlington transistor.

FEATURES

- * Collector-Emitter Voltage: $V_{CES} = 30V$
- * Collector Dissipation: $P_{C(MAX)} = 350\text{ mW}$

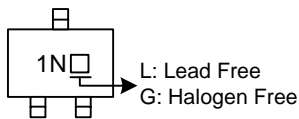


ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen Free		1	2	3	
MMBTA14-AE3-R	MMBTA14L-AE3-R	MMBTA14G-AE3-R	SOT-23	E	B	C	Tape Reel

<p>MMBTA14L-AE3-R</p>	<p>(1) R: Tape Reel</p> <p>(2) AE3: SOT-23</p> <p>(3) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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MARKING



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■ ABSOLUTE MAXIMUM RATING (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	30	V
Collector-Emitter Voltage	V _{CES}	30	V
Emitter-Base Voltage	V _{EBO}	10	V
Collector Dissipation (T _C =25°C)	P _C	350	mW
Collector Current	I _C	500	mA
Junction Temperature	T _J	+150	°C
Storage Temperature	T _{STG}	-40 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV _{CES}	I _C =100μA, I _B =0	30			V
Collector CutOff Current	I _{CB0}	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 =100 mA (Note)	20000			
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =100mA, I _B =0.1mA (Note)			1.5	V
Base-Emitter on Voltage	V _{BE(ON)}	V _{CE} =5V, I _C =100mA (Note)			2.0	V
Current Gain Bandwidth Product	f _T	V _{CE} =5V, I _C =10mA, f=100MHz	125			MHz

Note: Pulse Width<300μs, Duty Cycle≤2%

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