

UTC MMBTA13

NPN EPITAXIAL SILICON TRANSISTOR

DARLINGTON TRANSISTOR

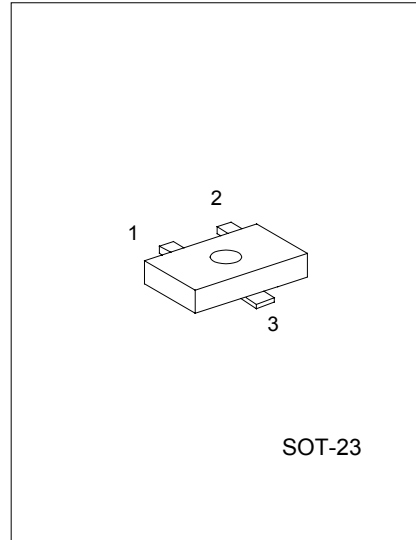
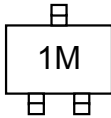
DESCRIPTION

The UTC MMBTA13 is a Darlington transistor.

FEATURES

- *Collector-Emitter Voltage: $V_{CES} = 30V$
- *Collector Dissipation: $P_c (mas) = 350 mW$

MARKING



1: EMITTER 2: BASE 3: COLLECTOR

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

PARAMETER	SYMBOL	VALUE	UNIT
Collector-Base Voltage	V_{CBO}	30	V
Collector-Emitter Voltage	V_{CES}	30	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Dissipation	P_c	350	mW
Collector Current	I_c	500	mA
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ C$

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-Emitter Breakdown Voltage	V_{CES}	$I_c=100\mu A, I_B=0$	30		V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=30V, I_E=0$		100	nA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=10V, I_c=0$		100	nA
DC Current Gain	h_{FE}	$V_{CE}=5V, I_c=100mA$	10000		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_c=100mA, I_B=0.1mA$		1.5	V
Base-Emitter on Voltage	$V_{BE(on)}$	$V_{CE}=5V, I_c=100mA$		2.0	V
Current Gain Bandwidth Product	f_T	$V_{CE}=5V, I_c=10mA, f=100MHz$	125		MHz

Pulse test: Pulse Width<300 μs , Duty Cycle=2%

TYPICAL CHARACTERISTICS

