

UTC MPSA113 NPN EPITAXIAL SILICON TRANSISTOR

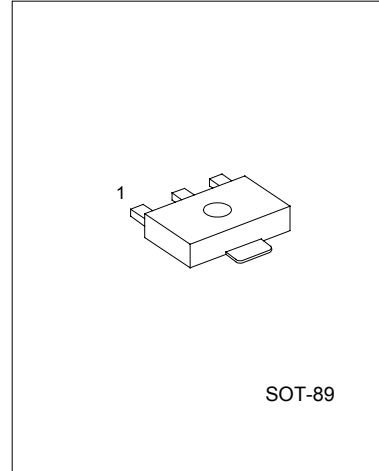
DARLINGTON TRANSISTOR

DESCRIPTION

The UTC MPSA113 is a Darlington transistor.

FEATURES

- *Collector-Emitter Voltage: $V_{CES} = 30V$
- *Collector Dissipation: $P_c (mas) = 625 mW$



1: EMITTER 2: COLLECTOR 3: BASE

ABSOLUTE MAXIMUM RATINGS (Operating temperature range applies unless otherwise specified.)

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($T_c=25^\circ C$)	P_c	625	mW
Collector Current	I_c	500	mA
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ C$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{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}	$V_{CE}=5V, I_c=100mA$	30000		
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%

UTC MPSA113 NPN EPITAXIAL SILICON TRANSISTOR

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.