UTC UNISONIC TECHNOLOGIES CO., LTD

MPSA113

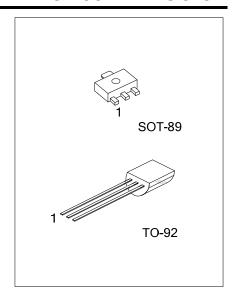
NPN EPITAXIAL SILICON TRANSISTOR

DARLINGTON TRANSISTOR

DESCRIPTION

The UTC MPSA113 is a Darlington transistor.

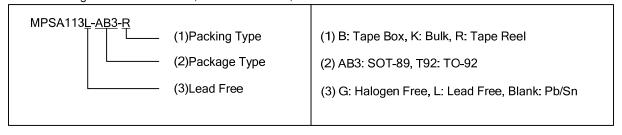
FEATURES



ORDERING INFORMATION

Ordering Number			Dookogo	Pin Assignment			Dooking	
Normal	Lead Free	Halogen Free	Package	1	2	3	Packing	
MPSA113-AB3-R	MPSA113L-AB3-R	MPSA113G-AB3-R	SOT-89	Е	С	В	Tape Reel	
MPSA113-T92-B	MPSA113L-T92-B	MPSA113G-T92-B	TO-92	Е	В	С	Tape Box	
MPSA113-T92-K	MPSA113L-T92-K	MPSA113G-T92-K	TO-92	Е	В	С	Bulk	

Note: Pin assignment: E: EMITTER, C: COLLECTOR, B: BASE



www.unisonic.com.tw 1 of 2 QW-R208-009.Ba

^{*} Collector-Emitter Voltage: V_{CES} = 30V

ABSOLUTE MAXIMUM RATING (Operating temperature range applies 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(Tc=25°C)	Pc	625	mW
Collector Current	Ic	500	mA
Junction Temperature	T_J	150	$^{\circ}\!\mathbb{C}$
Storage Temperature	T_{STG}	-55 ~ + 150	$^{\circ}\!\mathbb{C}$

Note: 1. 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 (T_J=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	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

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

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.