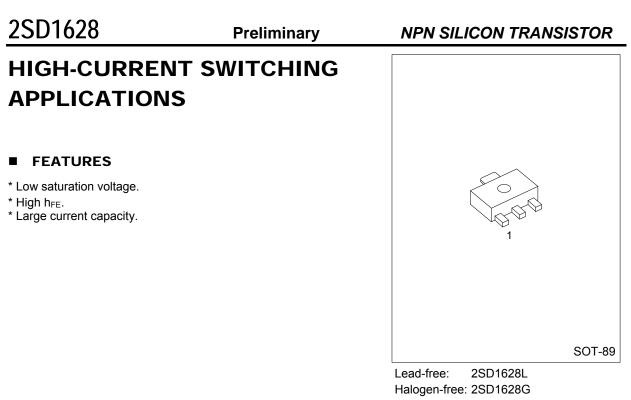


# **UTC** UNISONIC TECHNOLOGIES CO., LTD



#### **ORDERING INFORMATION**

Ordering Number			Dookogo	Pin Assignment			Dooking	
Normal	Lead Free Plating	Halogen Free	Package	1	2	3	Packing	
2SD1628-x-AB3-R	2SD1628L-x-AB3-R	2SD1628G-x-AB3-R	SOT-89	В	С	Е	Tape Reel	

2SD1628L-x-AB3-R (1)Packing Type (2)Package Type	(1) R: Tape Reel (2) AB3: SOT-89		
(3)Rank (4)Lead Plating	<ul> <li>(3) x: refer to Classification of h<sub>FE1</sub></li> <li>(4) G: Halogen Free, L: Lead Free Plating, Blank: Pb/Sn</li> </ul>		

### ■ ABSOLUATE MAXIUM RATINGS (Ta = 25°C)

PARAMETER	२	SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V <sub>CBO</sub>	60	V
Collector-Emitter Voltage		V <sub>CEO</sub>	20	V
Emitter-Base Voltage		V <sub>EBO</sub>	6	V
O-llaster Overset	DC	lc	5	А
Collector Current	Pulse	I <sub>CP</sub>	8	A
Collector Dissipation		Pc	0.5	W
Junction Temperature		TJ	150	°C
Storage Temperature		T <sub>STG</sub>	-55~+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)

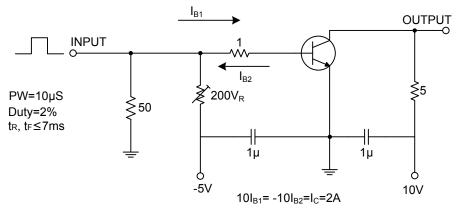
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =3A, I <sub>B</sub> =60mA			500	mV
Base-Emitter Saturation Voltage	V <sub>BE(SAT)</sub>	I <sub>C</sub> =3A, I <sub>B</sub> =60mA			1.5	V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =50V, I <sub>E</sub> =0			100	nA
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			100	nA
DC Current Gain	h <sub>FE1</sub>	V <sub>CE</sub> =2V, I <sub>C</sub> =0.5A	120		560	
	h <sub>FE2</sub>	$V_{CE}$ =2V, $I_C$ =3A	95			
Output Capacitance	Cob	V <sub>CB</sub> =10V, f =1MHz		45		рF
Transition Frequency	f⊤	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA		120		MHz
Turn On Time	t <sub>ON</sub>			30		ns
Storage Time	ts	See specified Test circuit		300		ns
Fall Time	t⊧			40		ns

# CLASSIFICATION OF h<sub>FE1</sub>

RANK	E	F	G
RANGE	120 ~ 200	160 ~ 320	280 ~ 560



## SWITCHING TIME TEST CIRCUIT



Unit (Resistance:Ω, Capacitance:F)

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.

