UTC UNISONIC TECHNOLOGIES CO., LTD

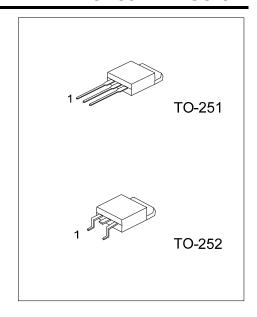
2SA1700

PNP EPITAXIAL SILICON TRANSISTOR

HIGH VOLTAGE DRIVER **APPLICATION**

FEATURES

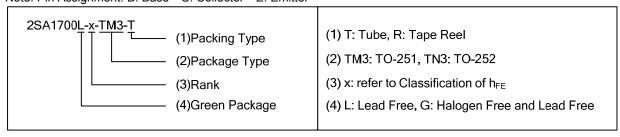
- * High breakdown voltage.
- * Excellent h_{FE} linearity.



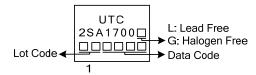
ORDERING INFORMATION

Ordering Number		Deelsese	Pin	Assignr	Daabiaa		
Lead Free	Halogen Free	Package	1	2	3	Packing	
2SA1700L-x-TM3-T	2SA1700G-x-TM3-T	TO-251	В	С	Е	Tube	
2SA1700L-x-TN3-R	2SA1700G-x-TN3-R	TO-252	В	С	Е	Tape Reel	

Note: Pin Assignment: B: Base C: Collector E: Emitter



MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-400	V
Collector-Emitter Voltage	V_{CEO}	-400	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I _C	-200	mA
Collector Current (PULSE)	I _{CP}	-400	mA
Davis Discipation	Б	1	W
Power Dissipation	P _D	10 (T _C =25°C)	W
Junction Temperature	TJ	150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°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.

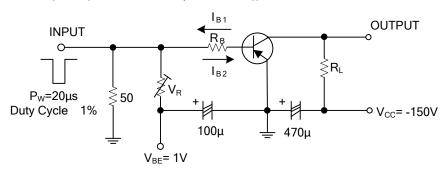
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

<u> </u>		 				1
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_CBO	$I_C = -10 \mu A, I_E = 0$	-400			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I_C = -1mA, I_B =0, R_{BE} = ∞	-400			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I _E = -10μA, I _C =0	-5			V
Collector Cutoff Current	I _{CBO}	V_{CB} = -300V, I_{E} =0			-0.1	μΑ
Emitter Cutoff Current	I _{EBO}	V _{EB} = -4V, I _C =0			-0.1	μΑ
DC Current Transfer Ratio	h _{FE}	V _{CE} = -10V, I _C = -50mA	60		200	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I_C = -50mA, I_B = -5mA			-0.8	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	I_C = -50mA, I_B = -5mA			-1.0	V
Output Capacitance	C _{OB}	V _{CB} = -30V, f=1MHz		5		pF
Reverse Transfer Capacitance	C _{RE}	V _{CB} = -30V, f=1MHz		4		pF
Gain-Bandwidth Product	f _T	V_{CE} = -30V, I_{C} = -10mA		70		MHz
Turn-on Time	ton	See test circuit		0.25		μS
Turn-off Time	toff	See test circuit		5		μS

CLASSIFICATION OF hfe

RANK	D	E
RANGE	60-120	100-200

■ **TEST CIRCUIT** (Unit : (resistance : Ω, capacitance : F))



-10I_{B1}= $10I_{B2}$ =Ic= -50mA R_L=3k Ω , R_B=200 Ω at Ic= -50mA

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