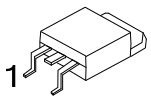
2SB936

Preliminary ***PNP EPITAXIAL SILICON TRANSISTOR***

SILICON PNP EPITAXIAL PLANAR TYPE



TO-252

■ DESCRIPTION

The UTC **2SB936** is a silicon PNP epitaxial planar type, it uses UTC's advanced technology to provide the customers with high DC current gain, low collector to emitter saturation voltage and high switch speed, etc.

The UTC **2SB936** is suitable for small electronic equipment and printed circuit board, etc.

■ FEATURES

* High DC current gain
* Low collector to emitter saturation voltage
* High switch speed

■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SB936L-TN3-T	2SB936G-TN3-T	TO-252	B	C	E	Tube
2SB936L-TN3-R	2SB936G-TN3-R	TO-252	B	C	E	Tape Reel

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

2SB936L-TN3-T (1)Packing Type (2)Package Type (3)Lead Free	(1) T: Tube, R: Tape Reel (2) TN3: TO-252 (3) L: Lead Free, G: Halogen Free

■ ABSOLUTE MAXIMUM RATINGS (T_C=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CBO}	-40	V
Collector-Emitter Voltage		V_{CEO}	-20	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-10	A
Peak Collector Current		I_{CP}	-20	A
Collector Power Dissipation	T_C=25°C	P_C	40	W
	T_A=25°C		1.3	W
Junction Temperature		T_J	150	°C
Storage Temperature		T_{STG}	-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 (T_C=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_C=-10mA, I_E=0	-40			V
Collector-Emitter Voltage	BV_{CEO}	I_C=-10mA, I_B=0	-20			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_C=-10mA, I_C=0	-5			V
Collector Cut-Off Current	I_{CBO}	V_{CB}=-40V, I_E=0			-50	μA
Emitter Cut-Off Current	I_{EBO}	V_{EB}=-5V, I_C=0			-50	μA
DC Current Gain	h_{FE1}	V_{CE}=-2V, I_C=-0.1A	45			
	h_{FE2}	V_{CE}=-2V, I_C=-3 A	90			
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	I_C=-10A, I_B=-0.33A			-0.6	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	I_C=-10A, I_B=-0.33A			-1.5	V
Transition Frequency	f_T	V_{CE}=-10V, f=10MHz, I_C=-0.5A		100		MHz
Output Capacitance	C_{ob}	V_{CB}=-10V, f=1MHz, I_E=0		400		pF
Turn-On Time	t_{on}	I_C=-3A, I_{B1}=-0.1A, I_{B2}=0.1A		0.1		μs
Storage Time	t_s			0.5		μs
Fall Time	t_r			0.1		μs