

S8550

LOW VOLTAGE HIGH CURRENT SMALL SIGNAL PNP TRANSISTOR

DESCRIPTION

The UTC **S8550** is a low voltage high current small signal PNP transistor, designed for Class B push-pull audio amplifier and general purpose applications.

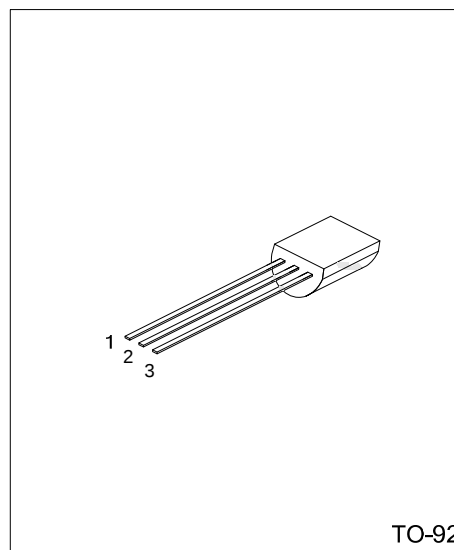
FEATURES

- * Collector current up to 700mA
- * Collector-Emitter voltage up to 20 V
- * Complementary to UTC S8050
- * Halogen Free

ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free	Halogen-Free		1	2	3	
S8550-x-T92-B	S8550L-x-T92-B	S8550G-x-T92-B	TO-92	E	B	C	Tape Box
S8550-x-T92-K	S8550L-x-T92-K	S8550G-x-T92-K	TO-92	E	B	C	Bulk

	(1)Packing Type	(1) B: Tape Box, K: Bulk
	(2)Package Type	(2) T92: TO-92
	(3)Rank	(3) x: refer to Classification of h_{FE2}
	(4)Lead Plating	(4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn



Lead-free: S8550L
Halogen-free: S8550G

S8550

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	-30	V
Collector-Emitter Voltage	V_{CEO}	-20	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-700	mA
Collector Dissipation (Ta = 25°C)	P_C	1	W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-65 ~ +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-Base Breakdown Voltage	BV_{CBO}	$I_C = -100\mu A, I_E = 0$	-30			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -1mA, I_B = 0$	-20			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E = -100\mu A, I_C = 0$	-5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-100	nA
DC Current Gain	h_{FE1}	$V_{CE} = -1V, I_C = -1mA$	100			
	h_{FE2}	$V_{CE} = -1V, I_C = -150mA$	120	110	400	
	h_{FE3}	$V_{CE} = -1V, I_C = -500mA$	40			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C = -500mA, I_B = -50mA$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C = 500mA, I_B = -50mA$			-1.2	V
Base-Emitter Saturation Voltage	V_{BE}	$V_{CE} = -1V, I_C = -10mA$			-1.0	V
Current Gain Bandwidth Product	f_T	$V_{CE} = -10V, I_C = -50mA$	100			MHz
Output Capacitance	C_{ob}	$V_{CB} = 10V, I_E = 0, f = 1MHz$		9.0		pF

■ CLASSIFICATION OF h_{FE2}

RANK	C	D	E
RANGE	120-200	160-300	280-400