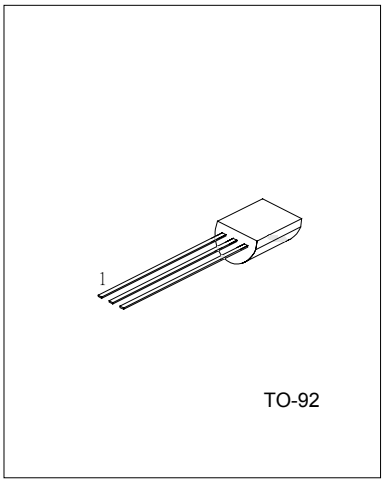
UTC M28S NPN EPITAXIAL SILICON TRANSISTOR

AUDIO OUTPUT DRIVER AMPLIFIER



TO-92

1:EMITTER 2:COLLECTOR 3:BASE

FEATURES

*Excellent HFE linearity
*High DC Current Gain
*High Power Dissipation

APPLICATION

*Audio output driver amplifier
*General purpose switch

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

PARAMETERS	SYMBOL	RATING	UNITS
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	20	V
Emitter-base voltage	V_{EBO}	6	V
Collector dissipation(Ta=25°C)	Pc	850	mW
Collector current	Ic	1.25	A
Base current	I_B	0.4	A
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base voltage	V_{CBO}	Ic=0.1mA	40			V
Collector-emitter voltage	V_{CEO}	Ic=1mA	20			V
Emitter-base voltage	V_{EBO}	I_E=0.1mA	6			V
Collector cut-off current	I_{CBO}	V_{CB}=35V,I_E=0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,Ic=0			100	nA
DC current gain(note)	h_{FE1}	V_{CE}=1V,Ic=1mA	290			
	h_{FE2}	V_{CE}=1V,Ic=0.1A	300		1000	
	h_{FE3}	V_{CE1}=1V,Ic=0.3A	300			
	h_{FE4}	V_{CE}=1V,Ic=0.5A	300			
Collector-emitter saturation voltage	V_{CE}(sat)	Ic=600mA,I_B=20mA			0.55	V
Current gain bandwidth product	f_T	V_{CE}=10V,Ic=50mA,f=1MHz	100			MHz
Output capacitance	Cob	V_{CB}=10V,I_E=0,f=1MHz		9		pF

CLASSIFICATION OF hFE2

RANK	B	C	D
RANGE	300-550	500-700	650-1000