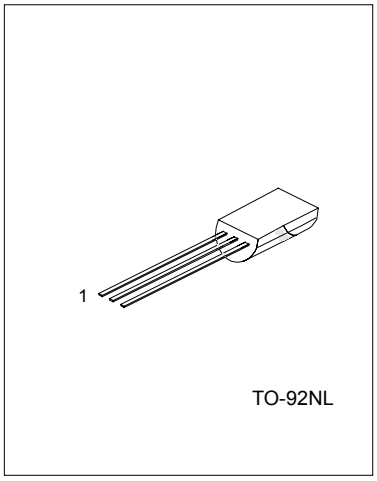
UTC 2SC2328A NPN EPITAXIAL SILICON TRANSISTOR

AUDIO POWER AMPLIFIER



1: EMITTER 2: COLLECTOR 3: BASE

FEATURES

*Collector Dissipation Pc=1 W
*3 W Output Application
*Complement of 2SA928A

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	30	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	5	V
Collector dissipation	Pc	1	W
Collector current	Ic	2	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 breakdown voltage	BV_{CBO}	Ic=100μA,I_E=0	30			V
Collector-emitter breakdown voltage	BV_{CEO}	Ic=10mA,I_B=0	30			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=1mA,Ic=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=30V,I_E=0			100	nA
Emitter cut-off current	I_{EBO}	V_{BE}=5V,Ic=0			100	nA
DC current gain(note)	h_{FE}	V_{CE}=2V,Ic=500mA	100		320	
Base-emitter on voltage	V_{BE}(on)	V_{CE}=2V,Ic=500mA			1	V
Collector-emitter saturation voltage	V_{CE}(sat)	Ic=1.5A,I_B=0.03A			2	V
Output capacitace	Cob	V_{CB} =10V, I_E =0,f=1MHz		30		pF
Current gain bandwidth product	f_T	V_{CE}=2V,Ic=500mA		120		MHz

CLASSIFICATION OF hFE

RANK	O	Y
RANGE	100-200	160-320

TYPICAL CHARACTERISTIC CURVES

FIG.1 STATIC CHARACTERISTIC

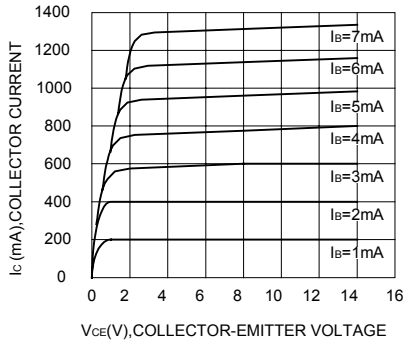


FIG.2 BASE-EMITTER ON VLOTAGE

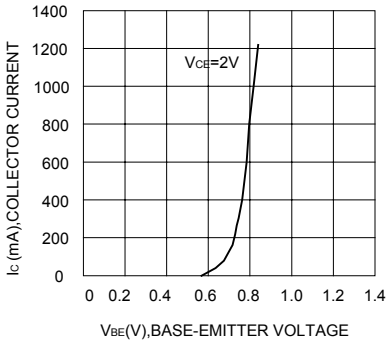


FIG.3 DC CURRENT GAIN

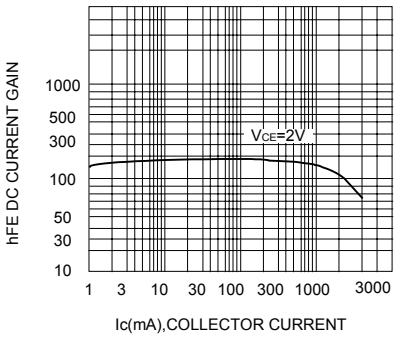


FIG.4 COLLECTOR-EMITTER SATURATION VOLTAGE

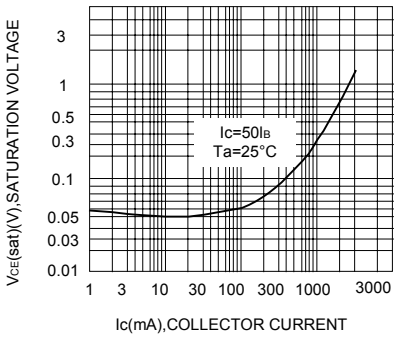


FIG.5 POWER DERATING

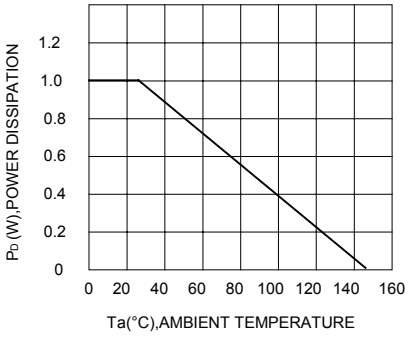


FIG.6 SAFE OPERATING AREA