



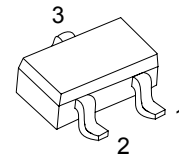
2SC2712

NPN SILICON TRANSISTOR

AUDIO FREQUENCY AMPLIFIER NPN TRANSISTOR

FEATURES

- * High Voltage and High Current
: $V_{CE0}=50V$, $I_C=150mA$ (Max.)
- * Excellent h_{FE} Linearity
: $h_{FE}(I_C=0.1mA)/h_{FE}(I_C=2mA)=0.95$ (Typ.)
- * High h_{FE}
- * Low Noise



SOT-23

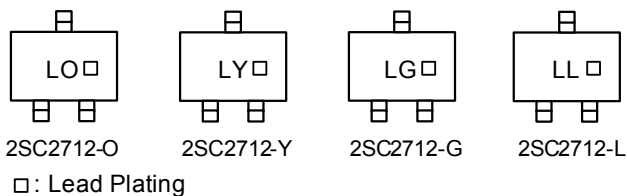
*Pb-free plating product number: 2SC2712L

ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
2SC2712-x-AE3-R	2SC2712L-x-AE3-R	SOT-23	E	B	C	Tape Reel

2SC2712L-x-AE3-R	(1) R: Tape Reel (2) AE3: SOT-23 (3) x: refer to Classification of h_{FE} (4) L: Lead Free Plating, Blank: Pb/Sn
-------------------------	--

MARKING



■ ABSOLUTE MAXIMUM RATINGS (Ta=25)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	150	mA
Base Current	I_B	30	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	+125	
Storage Temperature	T_{STG}	-55 ~ +125	

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.

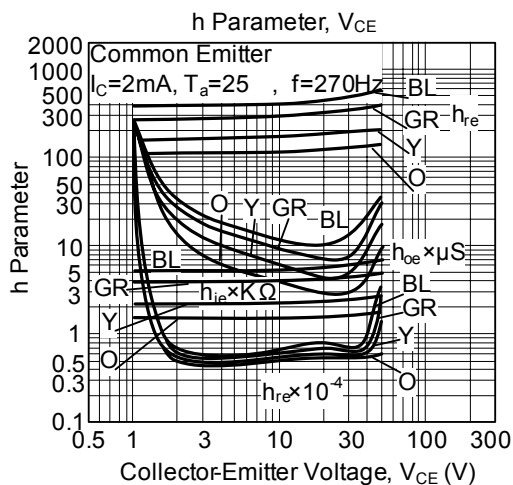
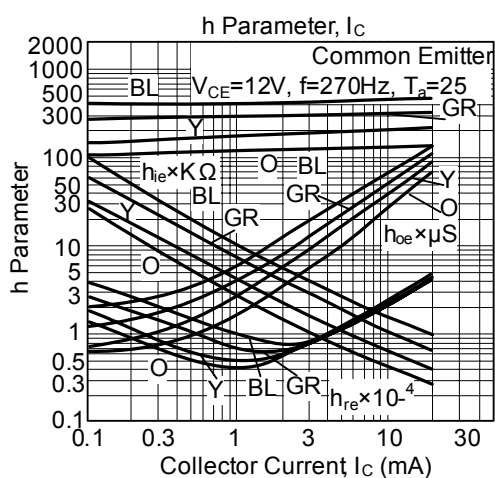
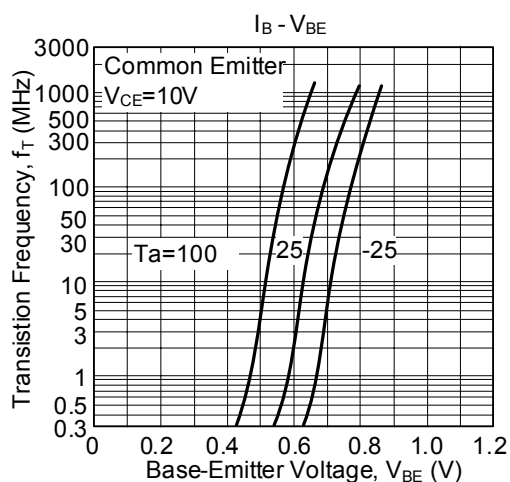
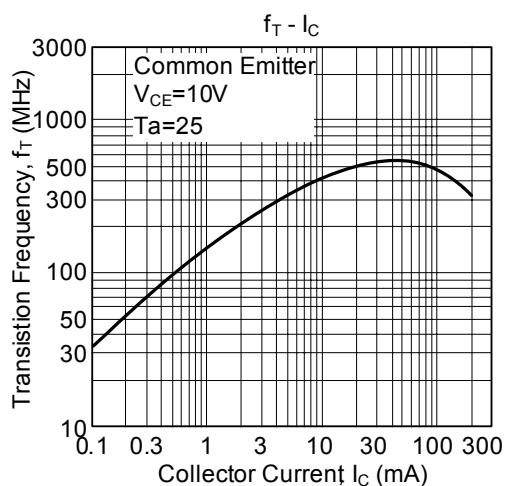
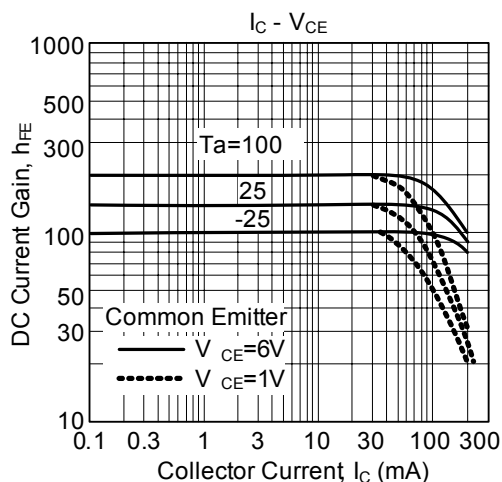
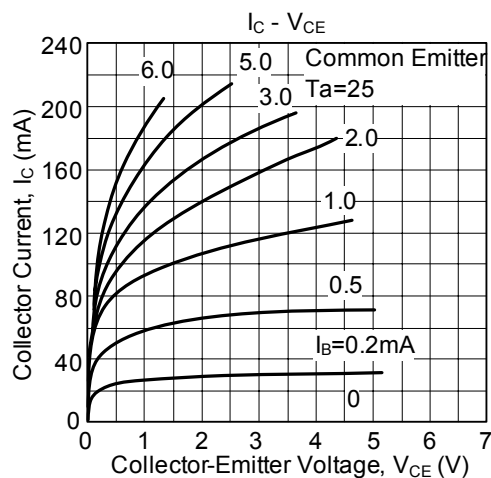
■ ELECTRICAL CHARACTERISTICS (Ta=25)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=60V, I_E=0$			0.1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=6V, I_C=2mA$	70		700	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=100mA, I_B=10mA$		0.1	0.25	V
Transistor Frequency	f_T	$V_{CE}=10V, I_C=1mA$	80			MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$		2.0	3.5	pF
Noise Figure	NF	$V_{CE}=6V, I_C=0.1mA$ $f=1kHz, R_g=10K\Omega$		1.0	10	dB

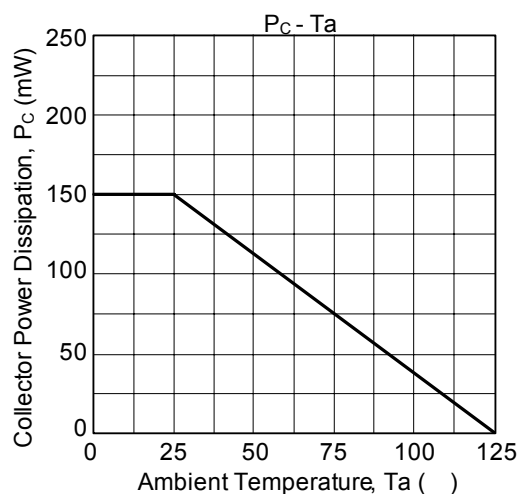
■ CLASSIFICATION OF h_{FE}

RANK	O	Y	G	L
RANGE	70~140	120~240	200~400	350~700

TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.