



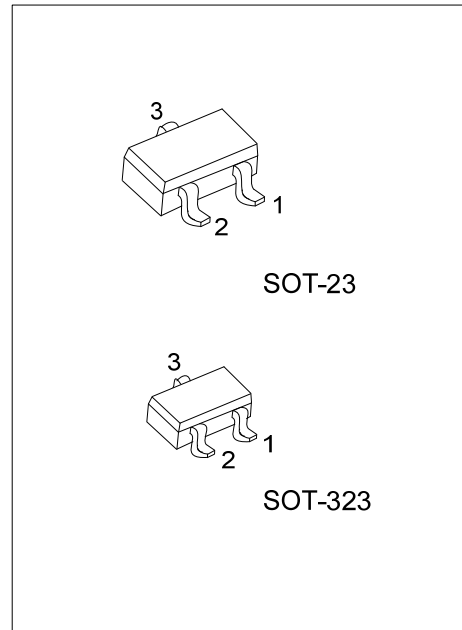
2SC2712

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



Lead-free: 2SC2712L
Halogen-free: 2SC2712G

■ **ORDERING INFORMATION**

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free	Halogen Free		1	2	3	
2SC2712-x-AE3-R	2SC2712L-x-AE3-R	2SC2712G-x-AE3-R	SOT-23	E	B	C	Tape Reel
2SC2712-x-AL3-R	2SC2712L-x-AL3-R	2SC2712G-x-AL3-R	SOT-323	E	B	C	Tape Reel

<p>2SC2712L-x-AE3-R</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Lead Plating</p>	<p>(1) R: Tape Reel (2) AE3: SOT-23, AL3: SOT-323 (3) x: refer to Classification of h_{FE} (4) G: Halogen Free, L: Lead Free, Blank: Pb/Sn</p>
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■ **MARKING**

2SC2712-Y	2SC2712-G	2SC2712-L
<p>L: Lead Free G: Halogen Free</p>	<p>L: Lead Free G: Halogen Free</p>	<p>L: Lead Free G: Halogen Free</p>

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CB0}	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	°C
Storage Temperature	T _{STG}	-55 ~ +125	°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.

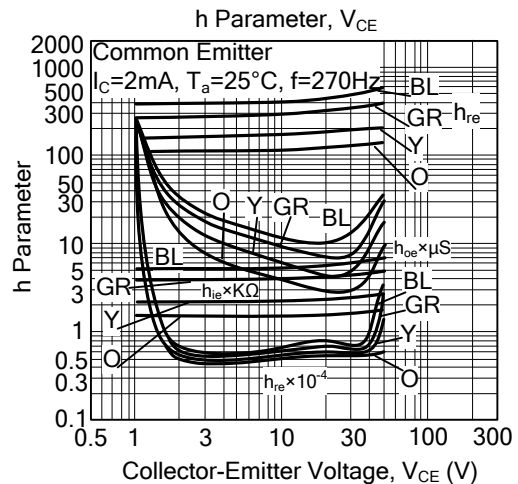
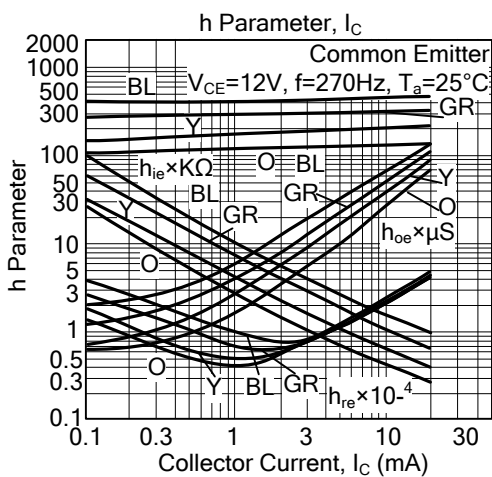
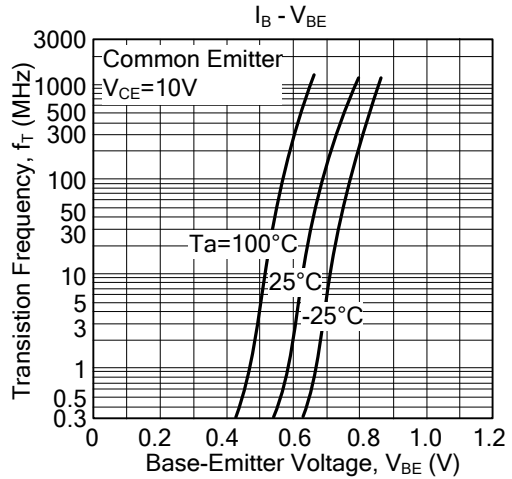
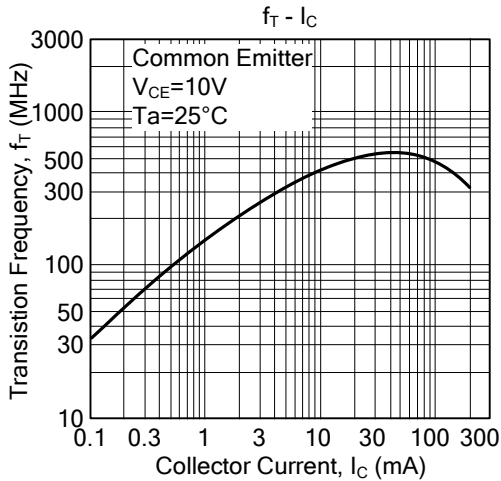
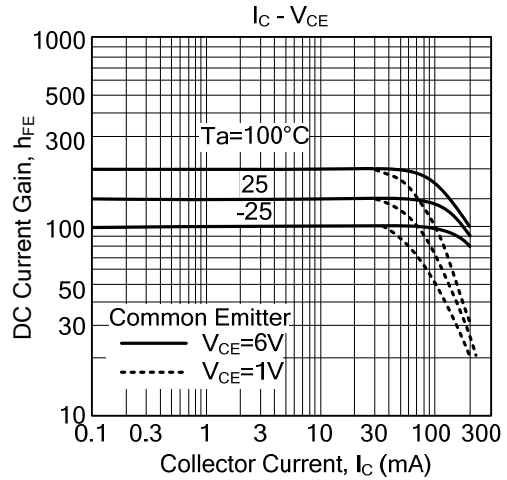
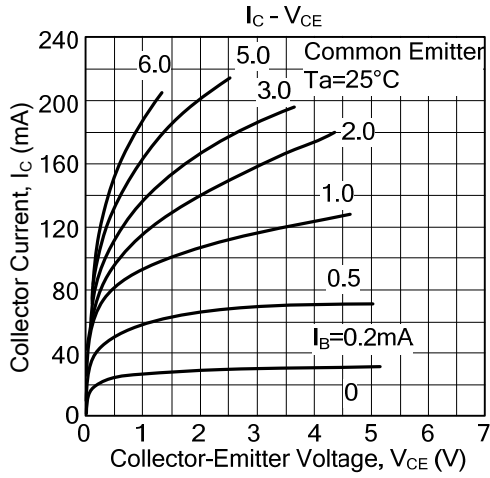
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise stated)

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 =10KΩ		1.0	10	dB

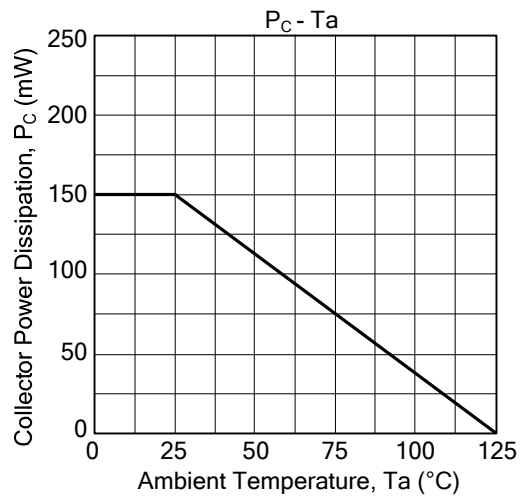
■ CLASSIFICATION OF h_{FE}

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

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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