

MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

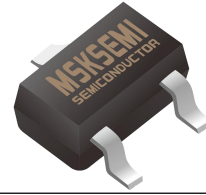
2SC4226

Product specification

Features

- CollectorCurrentCapability $I_C=100\text{mA}$
- CollectorEmitterVoltage $V_{CEO}=12\text{V}$

SOT-323



Classification of hfe

Type	2SC4226 R23-MS	2SC4226 R24-MS	2SC4226 R25-MS
Range	40-80	70-140	125-250
Marking	R23	R24	R25

AbsoluteMaximumRatings $T_a=25^{\circ}\text{C}$

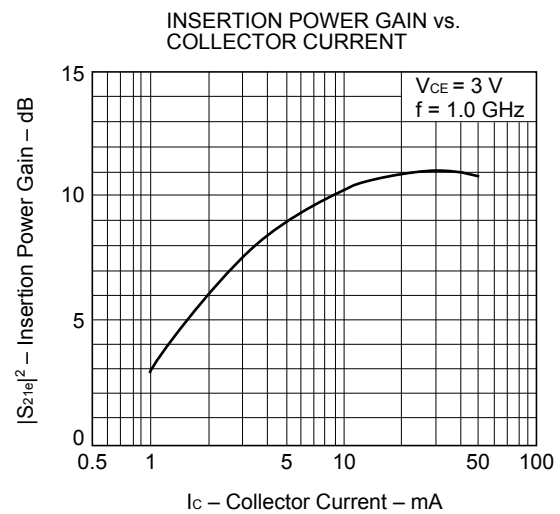
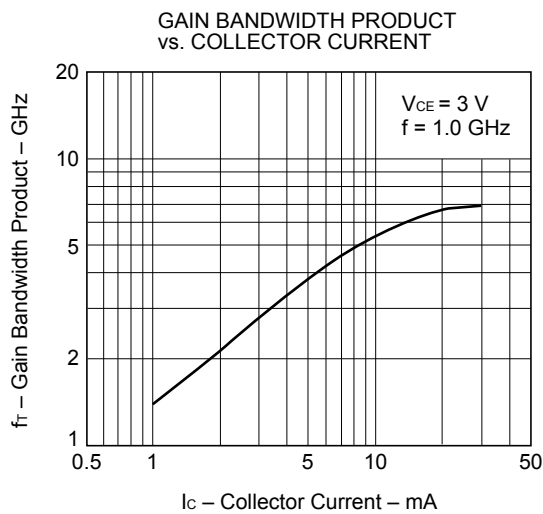
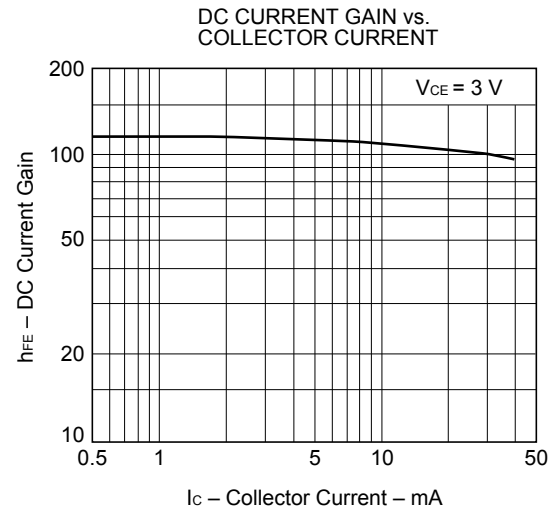
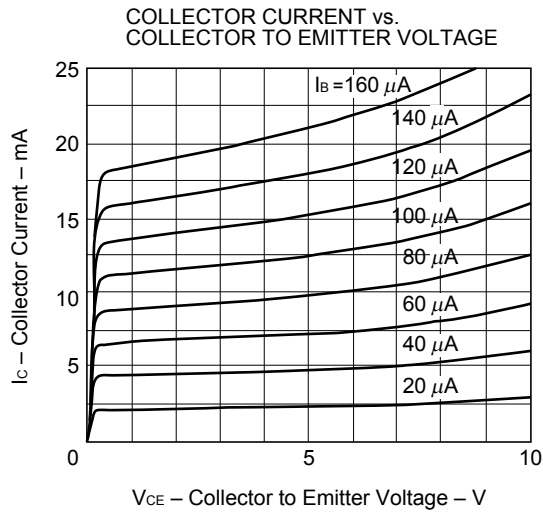
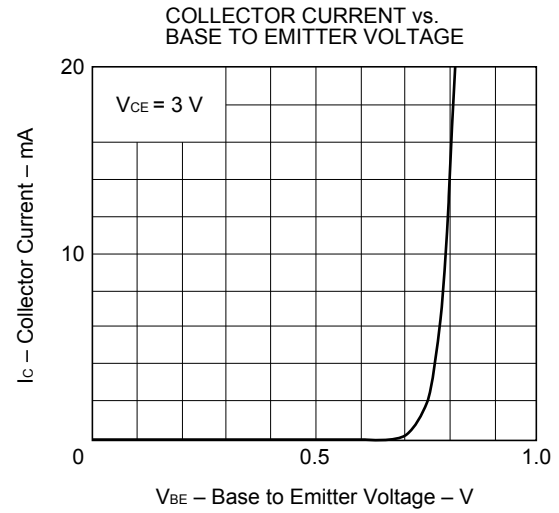
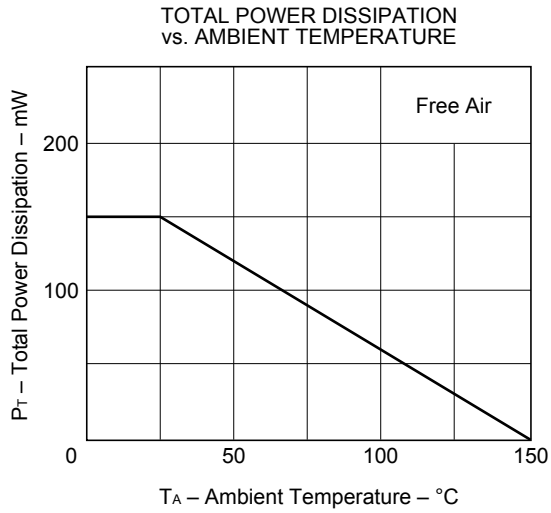
Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	20	V
Collector - Emitter Voltage	V_{CEO}	12	
Emitter - Base Voltage	V_{EBO}	3	
Collector Current - Continuous	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}	-65 to 150	

ElectricalCharacteristics $T_a=25^{\circ}\text{C}$

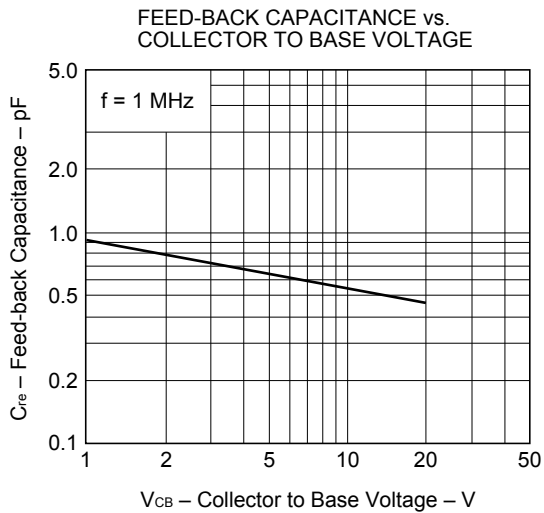
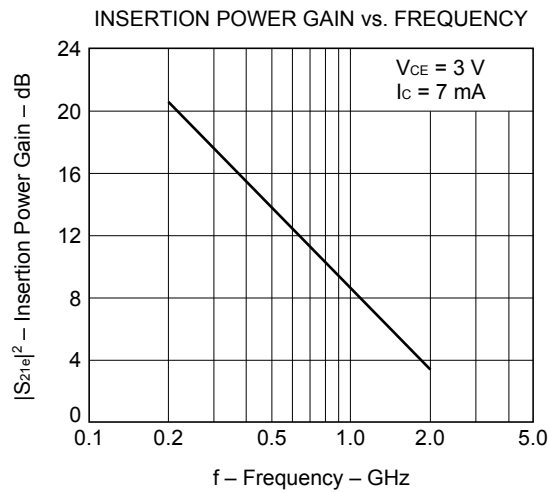
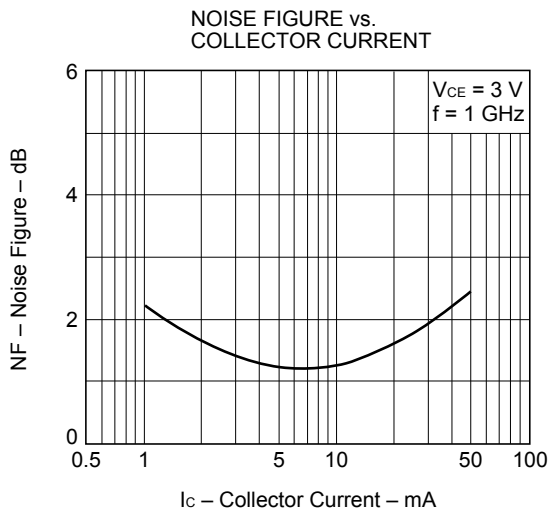
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	$I_C=100\mu\text{A}$, $I_E=0$	20			V
Collector- emitter breakdown voltage	V_{CEO}	$I_C=1\text{mA}$, $I_B=0$	12			
Emitter - base breakdown voltage	V_{EBO}	$I_E=100\mu\text{A}$, $I_C=0$	3			
Collector-base cut-off current	I_{CBO}	$V_{CB}=10\text{V}$, $I_E=0$			1	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=1\text{V}$, $I_C=0$			1	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=100\text{mA}$, $I_B=10\text{mA}$			0.5	V
Base - emitter saturation voltage	$V_{BE(sat)}$	$I_C=100\text{mA}$, $I_B=10\text{mA}$			1.2	
DC current gain	h_{FE}	$V_{CE}=3\text{V}$, $I_C=7\text{mA}$	40		250	
Insertion Power Gain	$ S_{21e} ^2$	$V_{CE}=3\text{V}$, $I_C=7\text{mA}$, $f=1\text{GHz}$	7			dB
Noise Figure	NF	$V_{CE}=3\text{V}$, $I_C=7\text{mA}$, $f=1\text{GHz}$			2.5	
Feedback Capacitance	C_{re}	$V_{CE}=3\text{V}$, $I_E=0$, $f=1\text{MHz}$			1.5	
Transition frequency	f_T	$V_{CE}=3\text{V}$, $I_C=7\text{mA}$	4.5			GHz

Note.PulseMeasurement;PW≤350us,DutyCycles≤2%Pulsed.

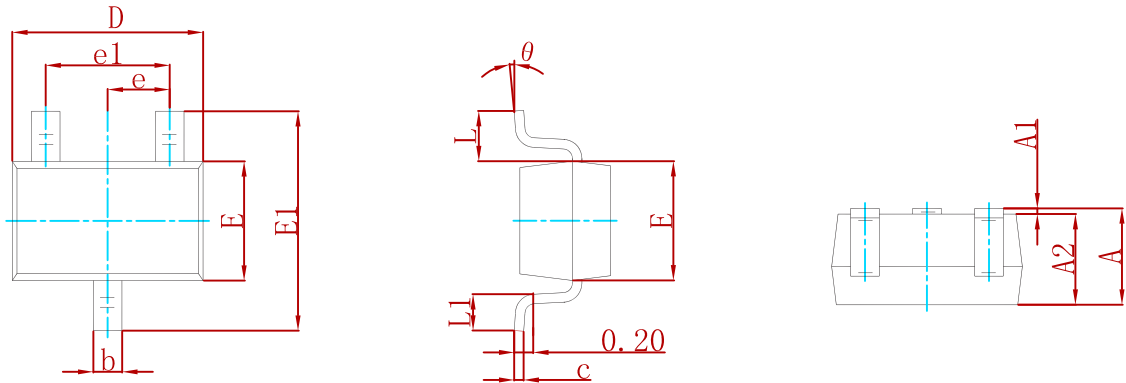
Typical Characteristics



Typical Characteristics

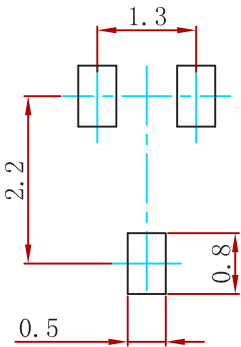


PACKAGE MECHANICAL DATA



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
2SC4226	SOT-323	3000

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