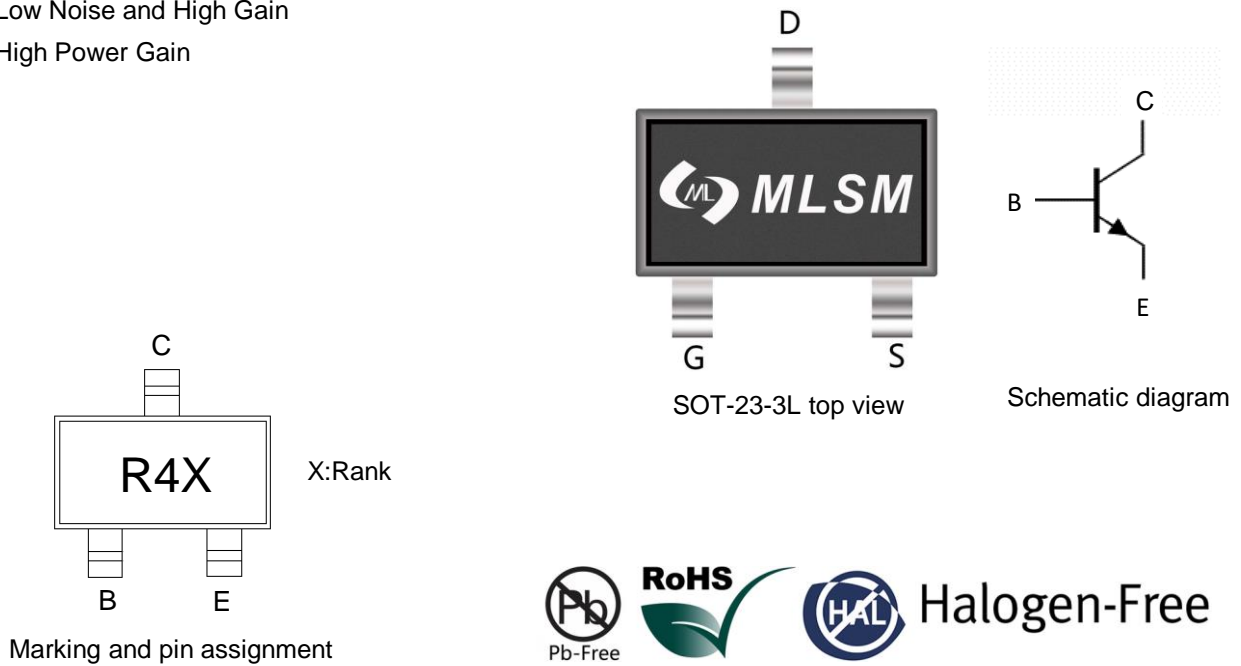


Features

- Low Noise and High Gain
- High Power Gain


Maximum Ratings ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	20	V
V_{CEO}	Collector-Emitter Voltage	10	V
V_{EBO}	Emitter-Base Voltage	1.5	V
I_C	Collector Current	35	mA
P_C	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^\circ\text{C/W}$
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	$^\circ\text{C}$

Ordering Information (Example)

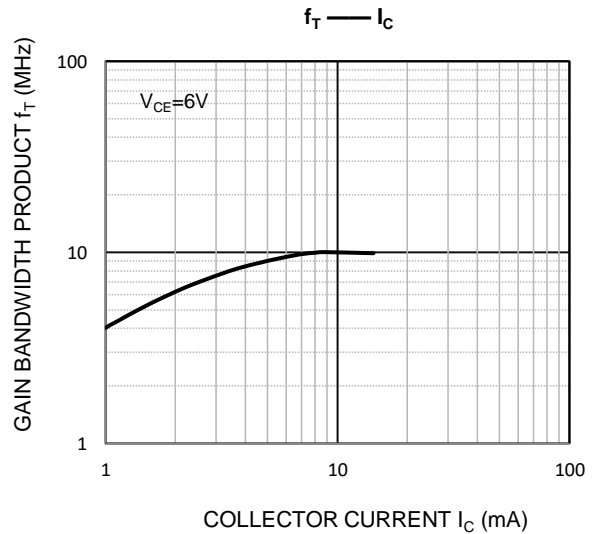
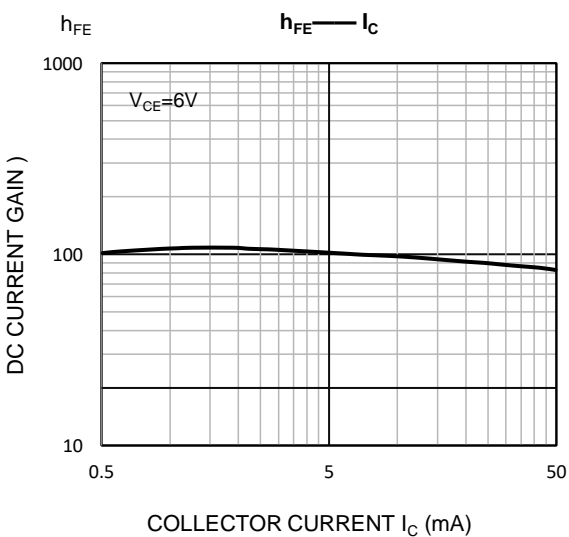
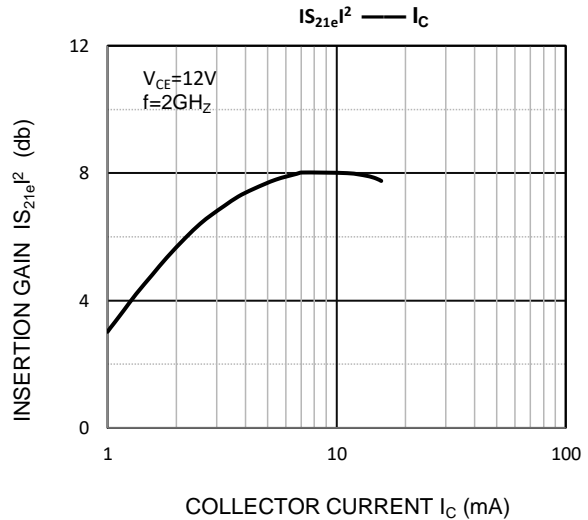
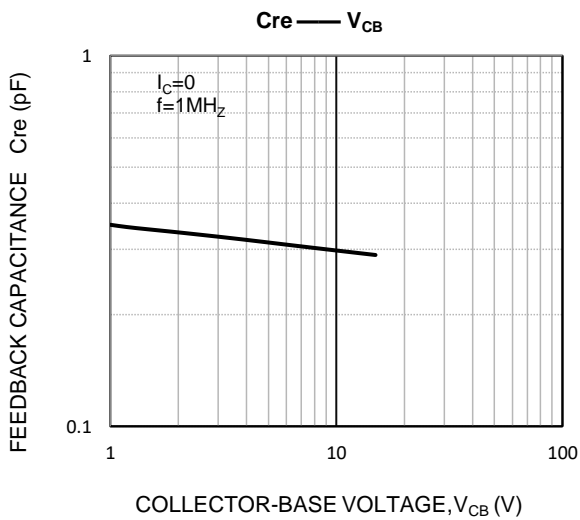
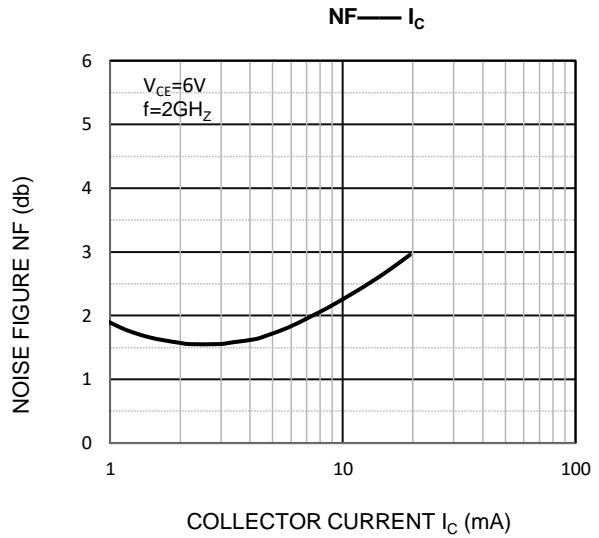
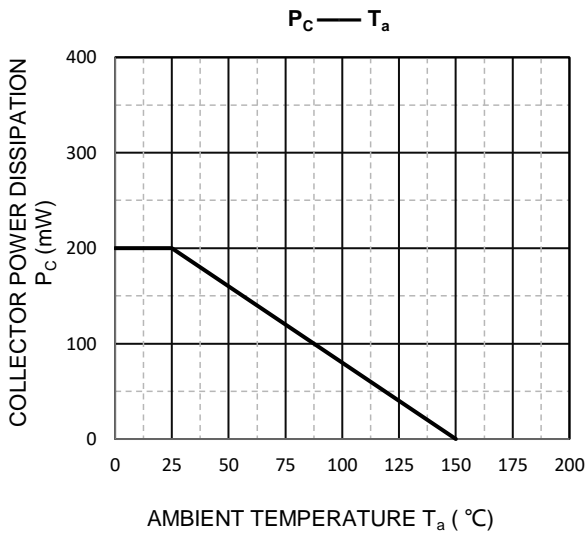
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
2SC3585	SOT-23-3L	R43/R44/R45	3,000	45,000	180,000	7" reel

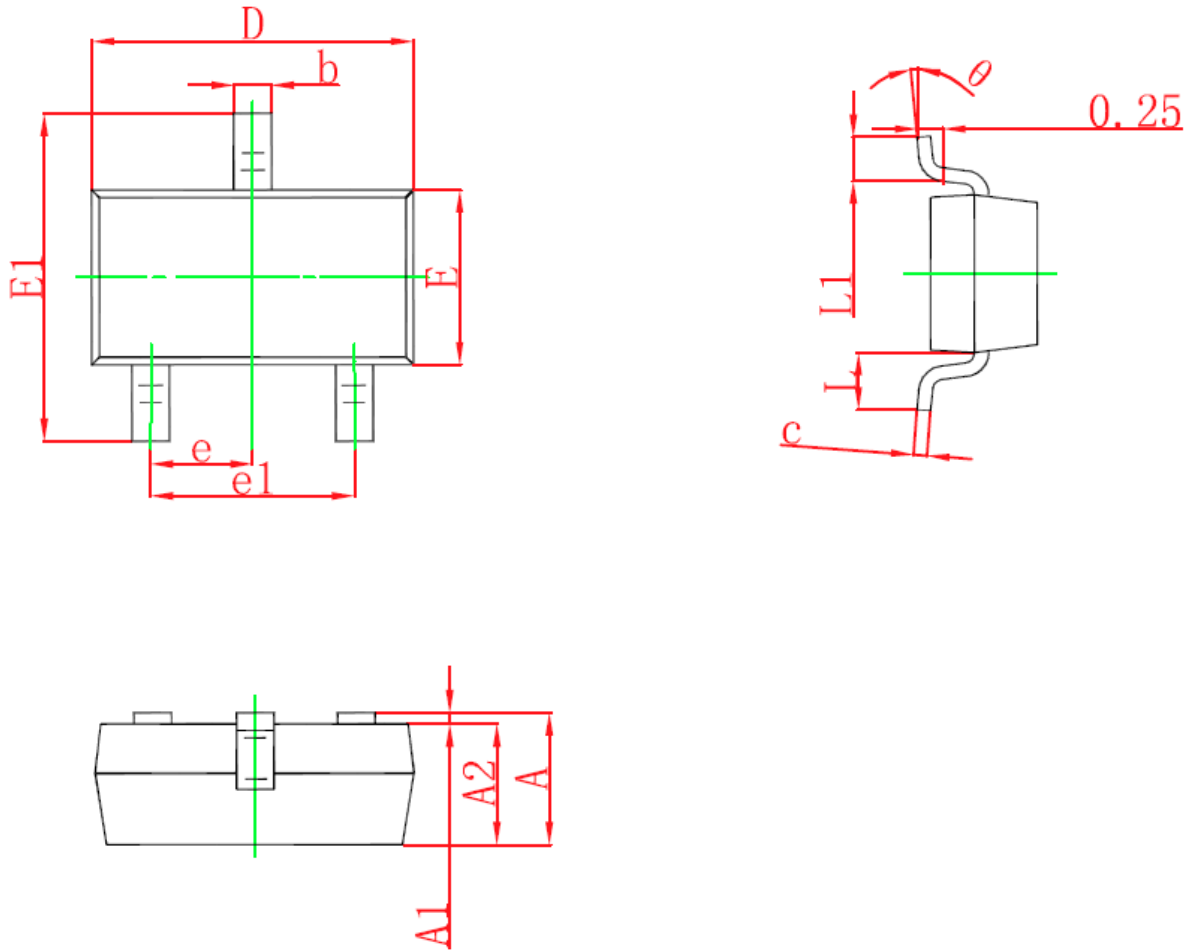
ELECTRICAL CHARACTERISTICS(Ta=25°C unless otherwise specified)

Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	20	--	--	V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	10	--	--	V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu A, I_C=0$	1.5	--	--	V
I_{CBO}	Collector cut-off current	$V_{CB}=10V, I_E=0$	--	--	1	μA
I_{EBO}	Emitter cut-off current	$V_{EB}=1V, I_C=0$	--	--	1	μA
h_{FE}	DC current gain	$V_{CE}=6V, I_C=10mA$	50	--	250	
N_F	Noise Figure	$V_{CB}=6V, I_C=5mA, f=2GHz$	--	1.8	3.0	dB
C_{re}	Feed-Back capacitance	$V_{CB}=10V, I_E=0mA, f=1MHz$	--	0.3	0.8	pF
f_T	Transition frequency	$V_{CE}=6V, I_C=10mA$	--	10	--	GHz

Classification of h_{FE}

Rank	A	B	C
Marking	R43	R44	R45
Range	50-100	80-160	125-250

Typical Operating Characteristics


SOT-23-3L Package information


Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E1	2.250	2.550	0.088	0.100
E	1.200	1.400	0.047	0.055
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°