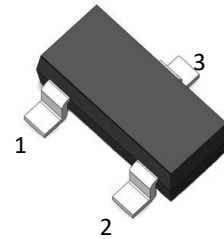
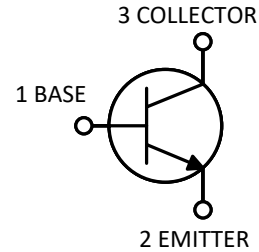


### »Features

$V_{CE} = 25V$   
 $I_C = 50mA$   
 $f_T = 650MHz @V_{CE}=10V, I_C=4mA, f=100MHz$

### »Pin Configurations



### »General Description

- Epitaxial planar die construction
- SOT-23 Plastic Package.

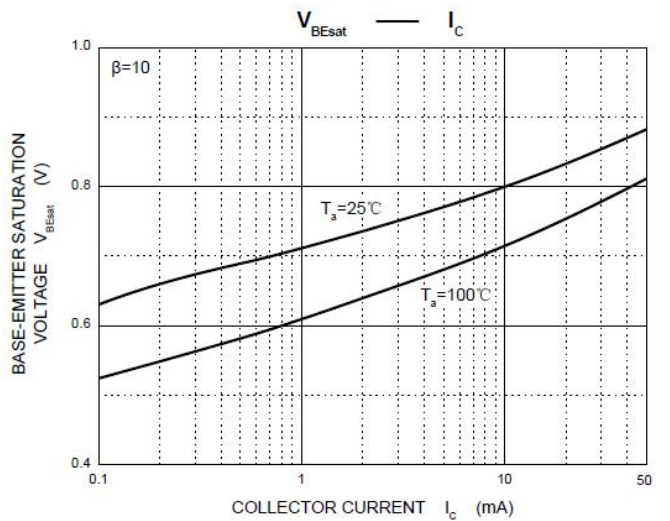
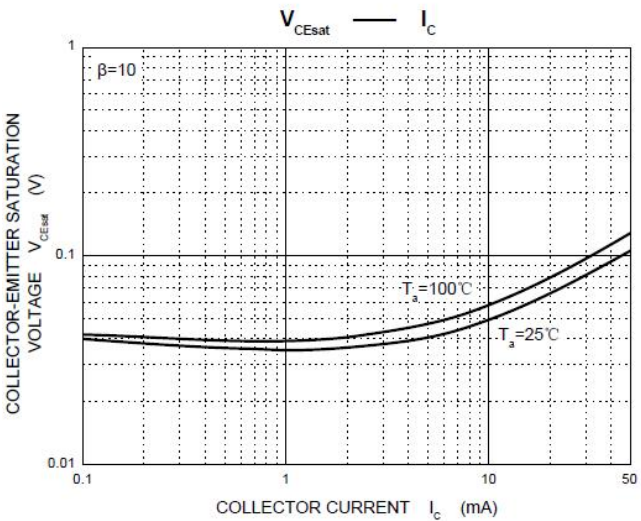
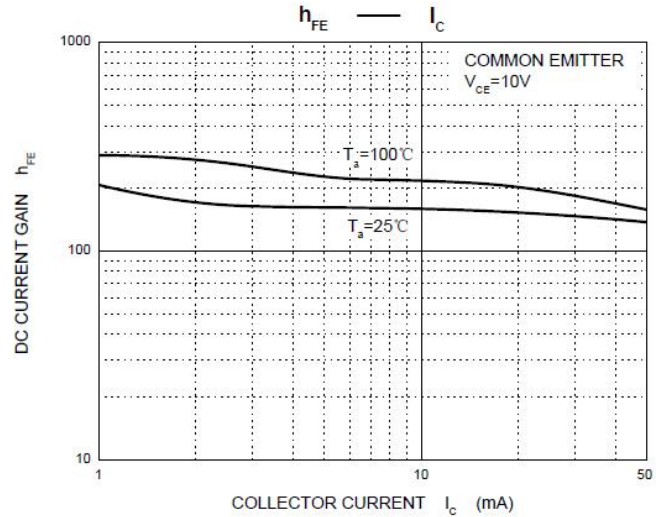
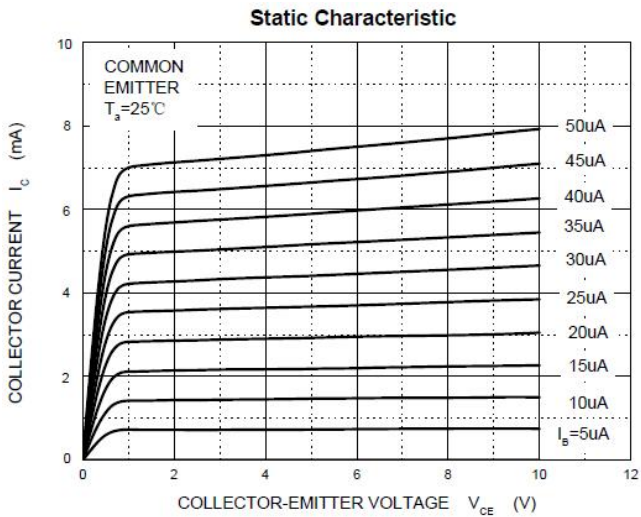
### »Absolute Maximum Ratings @ $T_A=25^{\circ}C$ unless otherwise noted

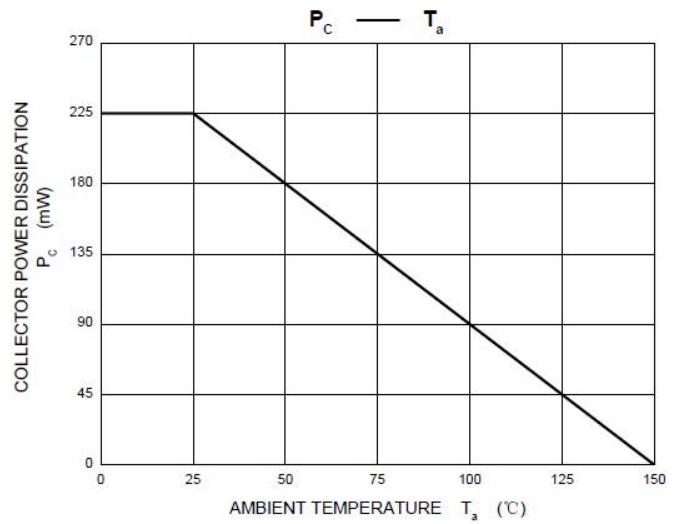
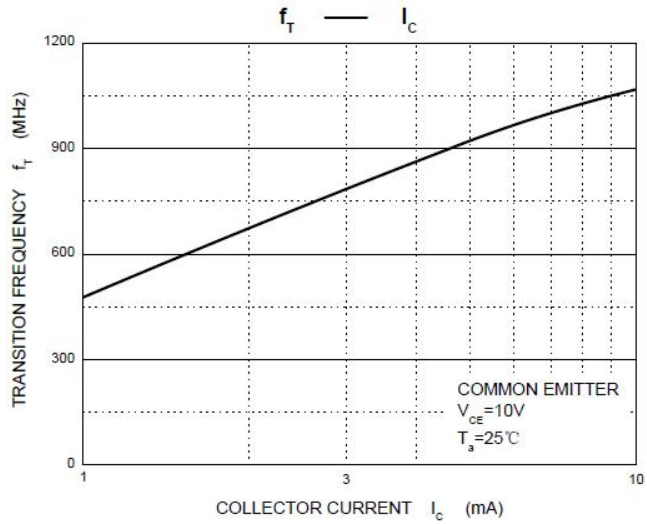
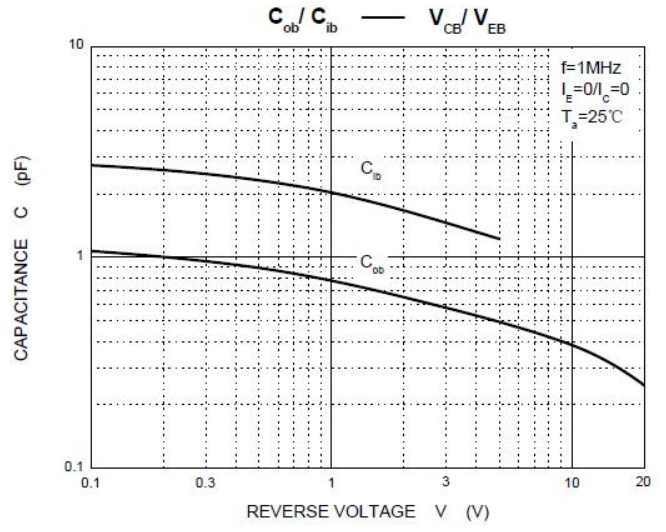
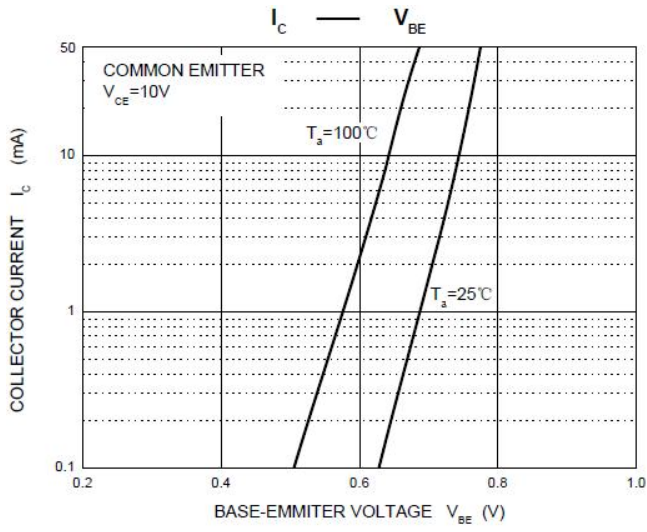
Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	30	V
$V_{CEO}$	Collector-Emitter Voltage	25	V
$V_{EBO}$	Emitter-Base Voltage	3	V
$I_C$	Collector Current	50	mA
$P_C$	Collector Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	625	$^{\circ}C/W$
$T_J, T_{stg}$	Operation Junction And Storage Temperature Range	-55~+150	$^{\circ}C$

### »Electrical Characteristics @ $T_A=25^{\circ}C$ unless otherwise noted

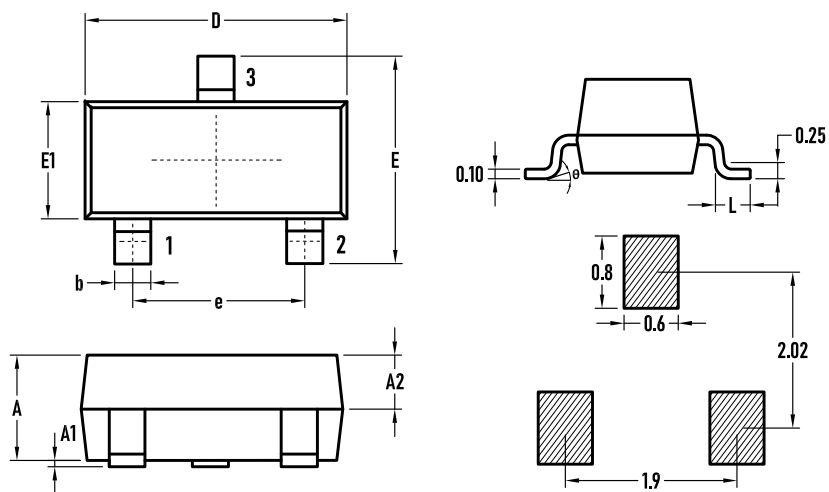
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	30			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	25			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu A, I_C=0$	3			V
$I_{CBO}$	Collector cut-off current	$V_{CB}=25V, I_E=0$			100	nA
$I_{EBO}$	Emitter cut-off current	$V_{EB}=2V, I_C=0$			100	nA
$h_{FE}$	DC current gain	$V_{CE}=10V, I_C=4mA$	100		200	
$V_{CE(sat)}$	Collector-emitter saturation voltage	$I_C=4mA, I_B=0.4mA$			0.5	V
$V_{BE(sat)}$	Base-emitter saturation voltage				1.0	V
$V_{BE}$	Base-emitter voltage	$V_{CE}=10V, I_C=4mA$			0.95	V
$f_T$	Transition frequency	$V_{CE}=10V, I_C=4mA, f=100MHz$	650			MHz
$C_{ob}$	Collector output capacitance	$V_{CB}=10V, I_E=0, f=1MHz$			0.7	pF

»Typical Performance Characteristics (( $T_J = 25\text{ }^\circ\text{C}$ , unless otherwise noted))



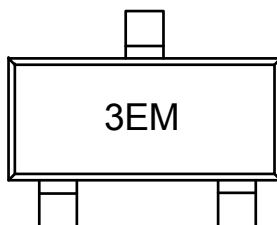


»Package Information-SOT23



SYMBOL	MILLIMETER		
	MIN.	Typ	MAX
A	0.90	1.00	1.10
A1	0.02	0.06	0.10
A2	–	0.60	–
D	2.85	2.90	2.95
b	0.37	0.40	0.43
E	2.35	2.40	2.45
E1	1.25	1.30	1.35
e	1.85	1.90	1.95
L	0.35	0.40	0.48
θ	0	–	6°

»Marking



»Ordering information

Order code	Package	Base qty	Deliverymode
MMBTH10	SOT-23	3K	Tape and reel