

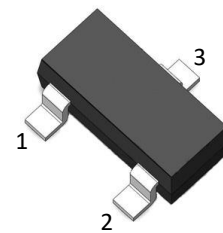
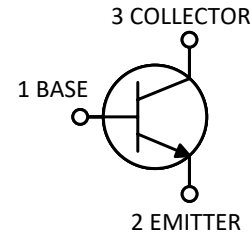
### »Features

$V_{CE} = 420V$

$I_C = 0.2A$

$f_T = 8MHz @V_{CE}=20V, I_C=20mA, f=1MHz$

### »Pin Configurations



### »General Description

- Power switching applications
- Epitaxial planar die constructio
- SOT-23 Plastic Package.

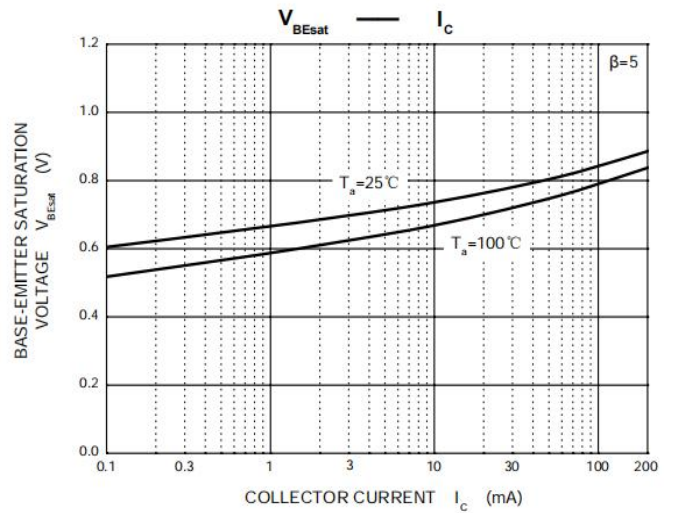
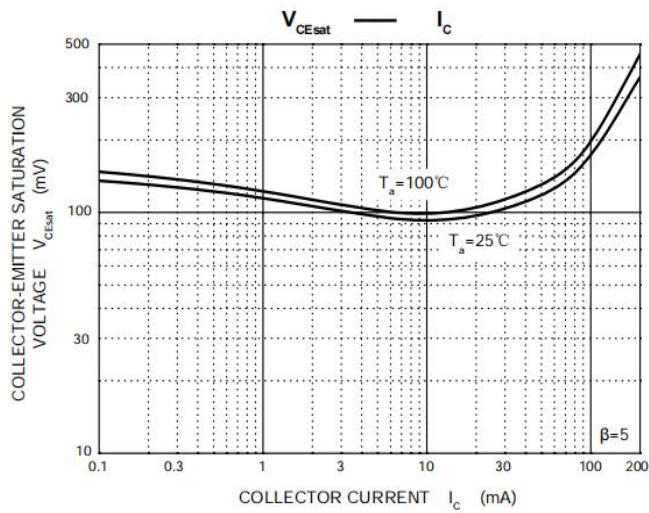
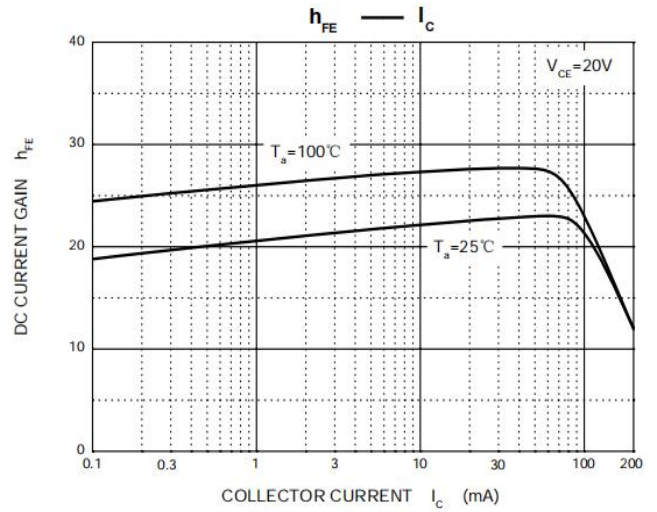
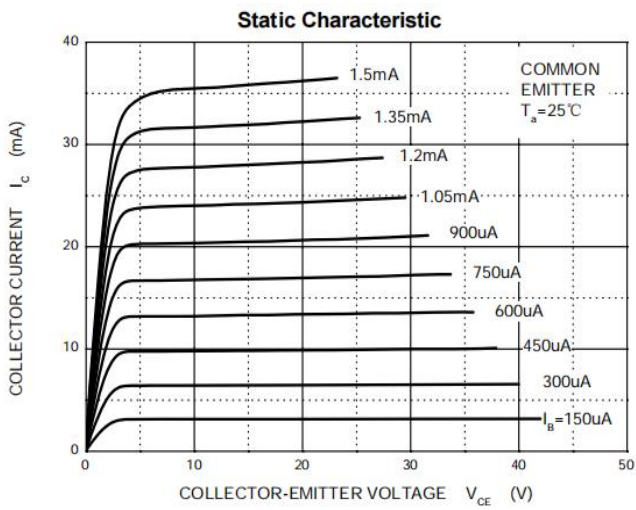
### »Absolute Maximum Ratings @ $T_A=25^{\circ}C$ unless otherwise noted

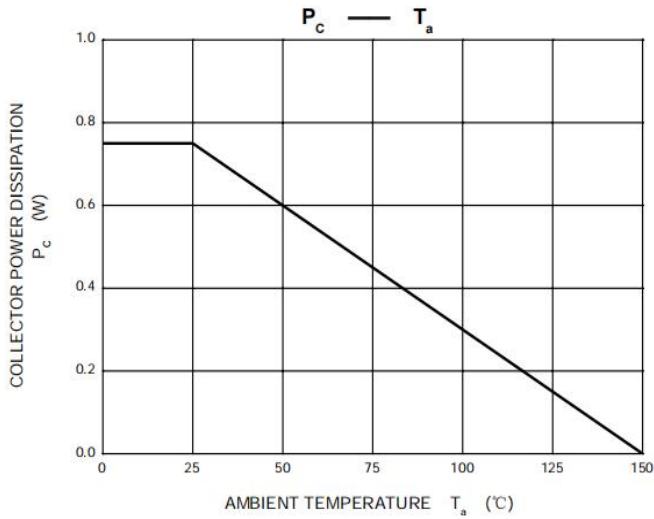
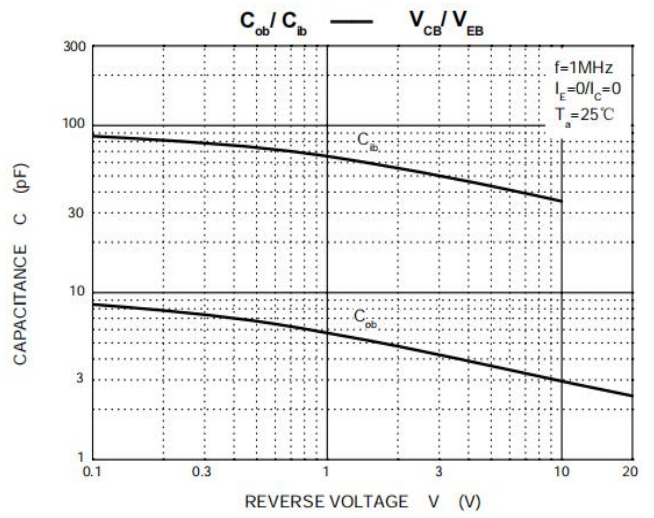
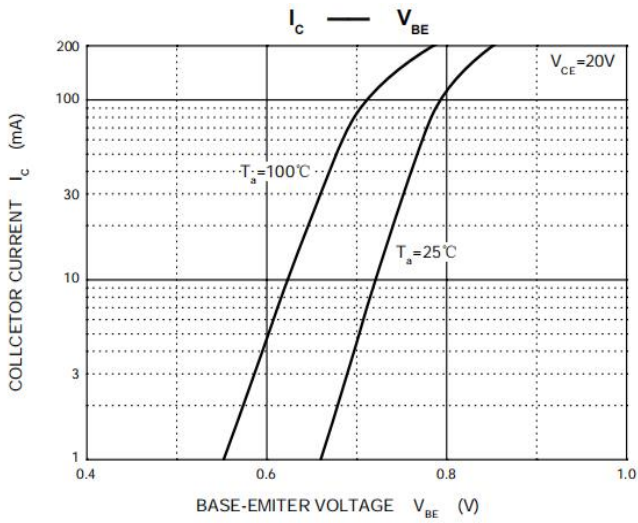
Symbol	Parameter	Value	Unit
VCBO	Collector-Base Voltage	600	V
VCEO	Collector-Emitter Voltage	420	V
VEBO	Emitter-Base Voltage	7	V
IC	Collector Current	0.2	A
PC	Collector Power Dissipation	300	mW
RθJA	Thermal Resistance From Junction To Ambient	400	$^{\circ}C/W$
TJ ,Tstg	Operation Junction And Storage Temperature Range	-55~+150	$^{\circ}C$

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

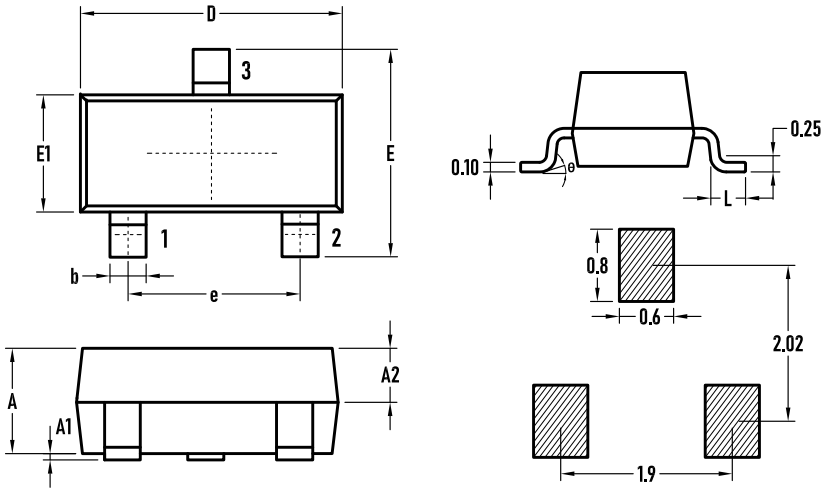
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C=100\mu A, I_E=0$	600			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1mA, I_B=0$	420			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=100\mu A, I_C=0$	7			V
$I_{CBO}$	Collector cut-off current	$V_{CB}=600V, I_E=0$			100	$\mu A$
$I_{CEO}$	Collector cut-off current	$V_{CE}=400V, I_E=0$			200	$\mu A$
$I_{EBO}$	Emitter cut-off current	$V_{EB}=7V, I_C=0$			100	$\mu A$
$h_{FE(1)}$	DC current gain(1)	$V_{CE}=20V, I_C=20mA$	18		30	
$h_{FE(2)}$	DC current gain(2)	$V_{CE}=10V, I_C=0.25mA$	5			
$V_{CE(sat)1}$	Collector-emitter saturation voltage	$I_C=50mA, I_B=10mA$			0.5	V
$V_{BE(sat)1}$	Base-emitter saturation voltage				1.2	V
$f_T$	Transition frequency	$V_{CE}=20V, I_C=20mA, f=1MHz$	8			MHz
tf	Fall time	$I_C=50mA, V_{CC}=45V, I_{B1}=-I_{B2}=5mA,$			0.3	$\mu S$
ts	Storage time				1.5	$\mu S$

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



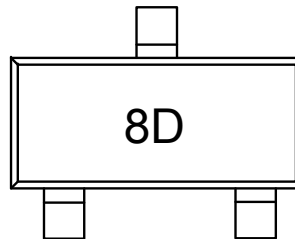


»Package Information SOT-23



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
$\theta$	0	–	6°

»Marking



»Ordering information

Order code	Package	Base qty	Delivery mode
13001	SOT-23	3K	Tape and reel