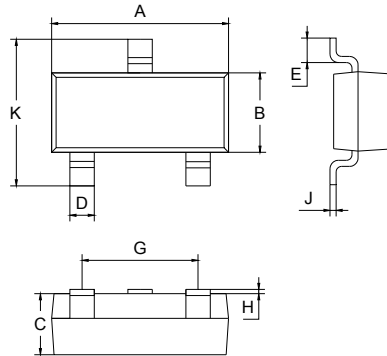


FEATURES

- High speed switching.
- Small flat package.

APPLICATIONS

- High voltage switch mode application.



SOT-23		
Dim	Min	Max
A	2.70	3.10
B	1.10	1.50
C	1.0 Typical	
D	0.4 Typical	
E	0.35	0.48
G	1.80	2.00
H	0.02	0.1
J	0.1 Typical	
K	2.20	2.60
All Dimensions in mm		

ORDERING INFORMATION

Type No.	Marking	Package Code
3CD14001	14001	SOT-23

MAXIMUM RATING @ Ta=25°C unless otherwise specified

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-400	V
V_{CEO}	Collector-Emitter Voltage	-400	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current -Continuous	-0.2	A
P_C	Collector Dissipation	350	mW
T_j, T_{stg}	Junction and Storage Temperature	-55 to +150	°C



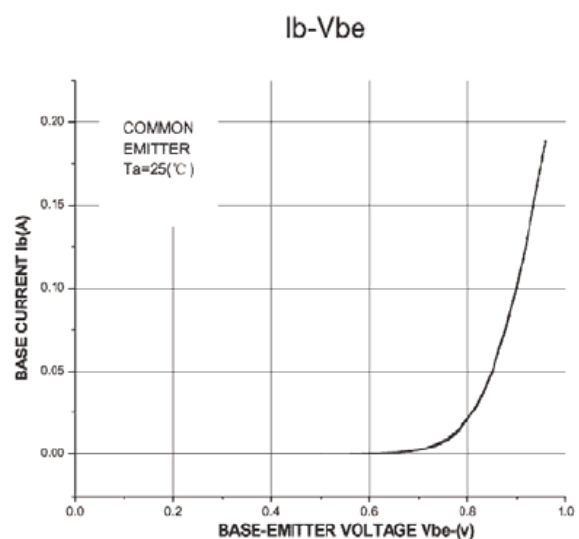
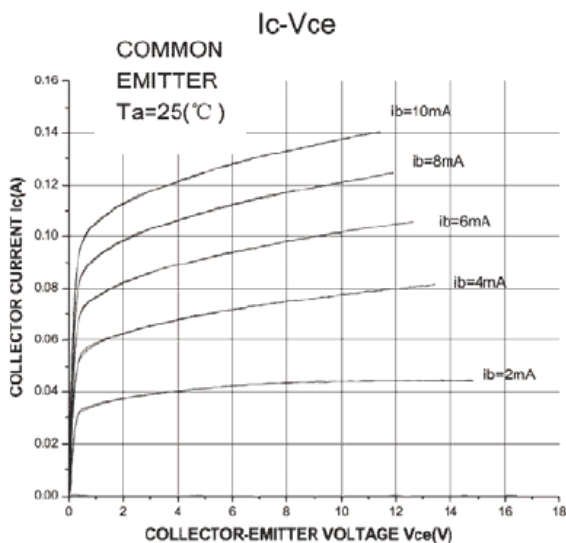
ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

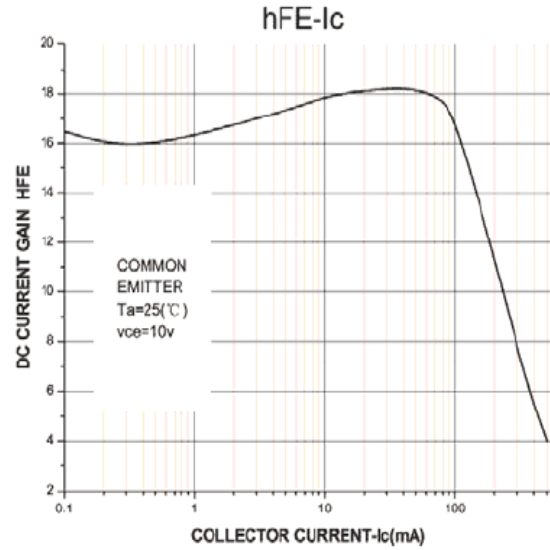
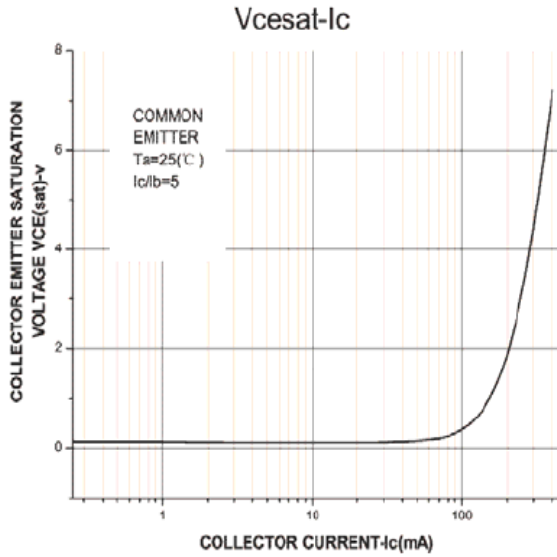
Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=-100\mu A, I_E=0$	-400			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=-1mA, I_B=0$	-400			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=-100\mu A, I_C=0$	-7			V
Collector cut-off current	I_{CBO}	$V_{CB}=-400V, I_E=0$			-100	μA
Collector cut-off current	I_{CEO}	$V_{CE}=-400V, I_B=0$			-200	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=-7V, I_C=0$			-100	μA
DC current gain	h_{FE}	$V_{CE}=-20V, I_C=-20mA$	10		40	
		$V_{CE}=-10V, I_C=-0.25A$	5			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=-50mA, I_B=-10mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=-50mA, I_B=-10mA$			-1.2	V
Transition frequency	f_T	$V_{CE}=-20V, I_C=-20mA, f=1MHz$	8			MHz
Fall time	t_f	$I_C=50mA, I_{B1}=I_{B2}=5mA, V_{CC}=45V$			0.3	μS
Storage time	t_s				1.5	μS

CLASSIFICATION OF $h_{FE(1)}$

Range	10-15	15-20	20-25	25-30	30-35	35-40
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TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified





Package	Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
SOT-23	3000pcs	7inch	45,000pcs	203×203×195	180,000pcs	438×438×220