

Silicon PNP SMD triode

1: base 2: emitter 3: collector

encapsulation mode: SOT-23

P/N suffix V means AEC-Q101 qualified, e.g:MMBT5401V

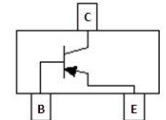
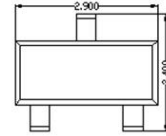
P/N suffix V means Halogen-free

High voltage switching transistor

Marking: 2L

Outline example

SOT23



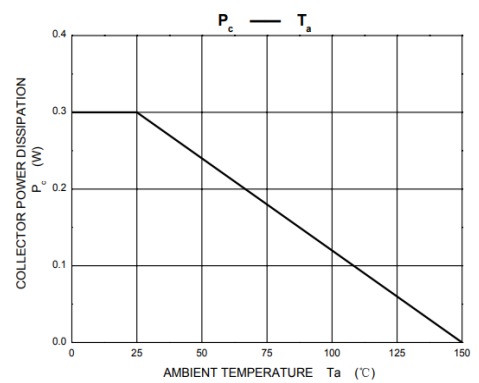
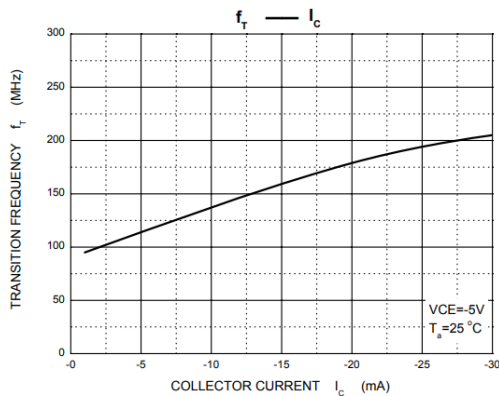
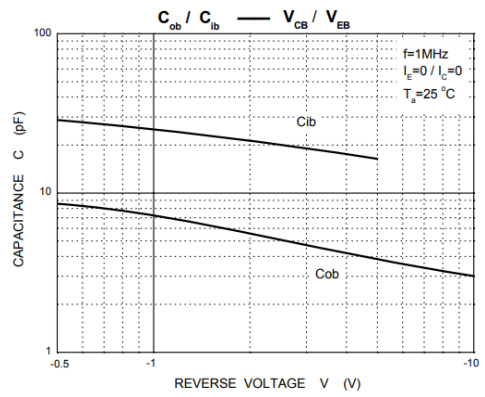
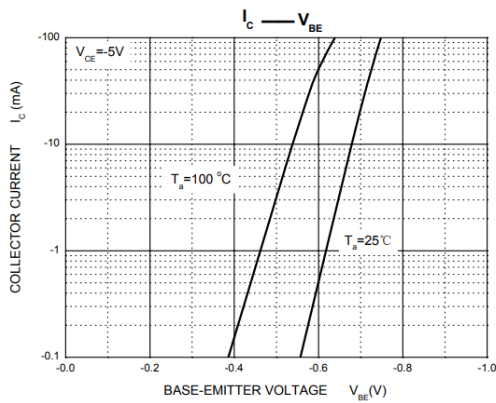
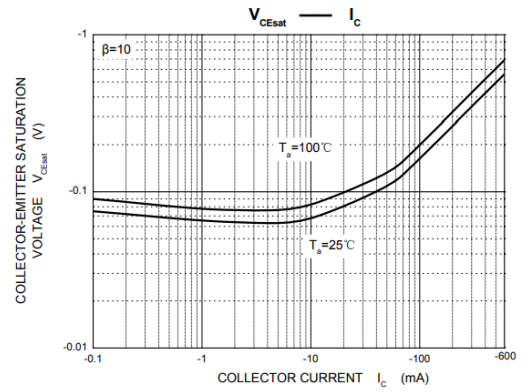
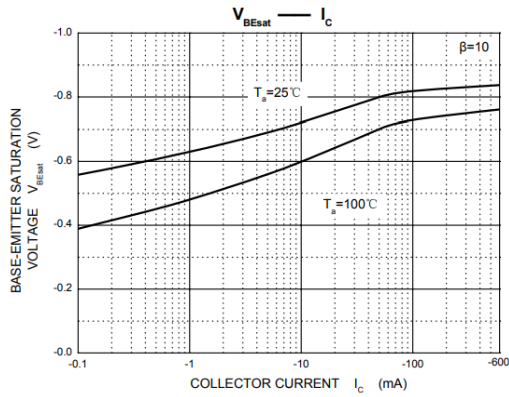
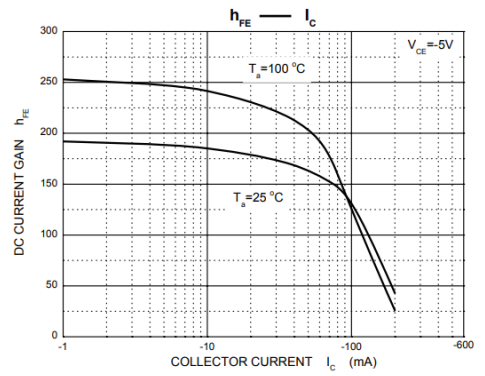
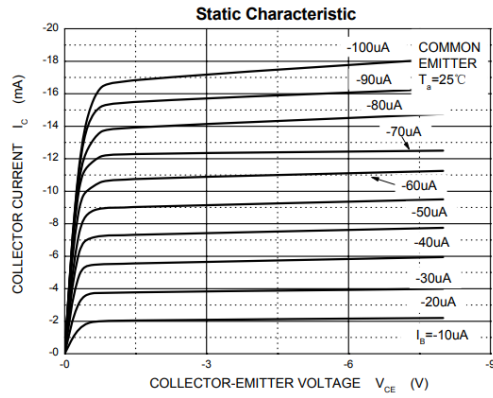
Maximum ratings(Ta=25℃ unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	VCBO	-160	V
Collector-Emitter Breakdown Voltage	VCEO	-150	V
Emitter-Base Breakdown Voltage	VEBO	-5	V
Collector Current	IC	-600	mA
Collector Power Dissipation	Pc	300	mW
Junction Temperature	TJ	-65~150	℃
Storage Temperature	Tstg	-65~150	℃

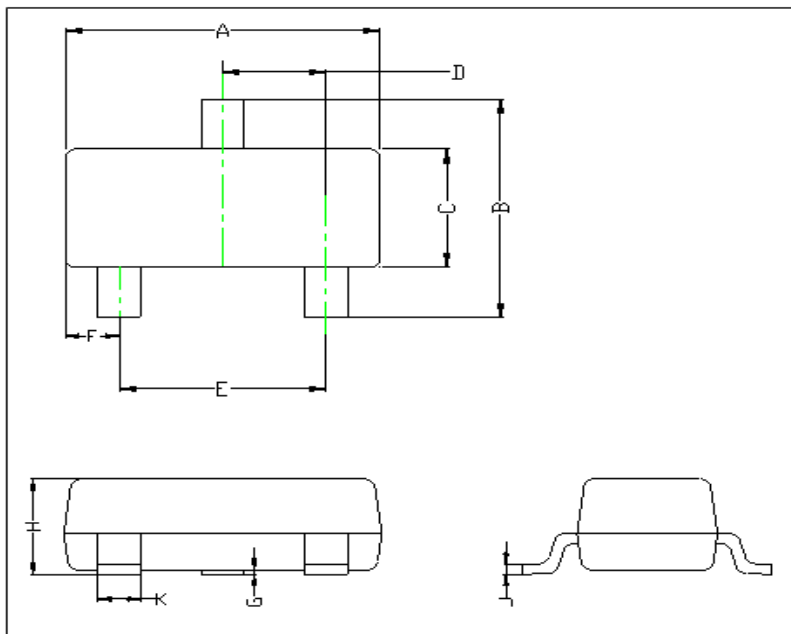
Electrical Characteristics (Ta=25℃ unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	VCBO	IC=-100uA IE=0	-160		V
Collector-Emitter Breakdown Voltage	VCEO	IC=-1mA IB=0	-150		V
Emitter-Base Breakdown Voltage	VEBO	IE=-100uA IC=0	-5		V
Collector Cutoff Current	ICBO	VCB=-120V IE=0		-0.1	uA
Emitter Cutoff Current	IEBO	VCE=-4V IB=0		-0.1	uA
DC Current Gain	HFE(1)	VCE=-5V IC=-1mA	80		
	HFE(2)	VCE=-5V IC=-10mA	100	300	
	HFE(3)	VCE=-5V IC=-50mA	50		
Collector-Emitter Saturation Voltage	VCE(sat)	IC=-10mA IB=-1mA		-0.2	V
		IC=-50mA IB=-5mA		-0.5	V
Collector-Base Saturation Voltage	VBE(sat)	IC=-10mA IB=-1mA		-1	V
		IC=-50mA IB=-5mA		-1	V
transition frequency	fr	VCE=-5V IC=-10mA f=30MHz	100		MHz

RATING AND CHARACTERISTICS CURVES (MMBT5401)



Package Outline : SOT23



SOT23 Package Outline

Symbol	Dimensions in mm	
	Min.	Max.
A	2.800	3.040
B	2.100	2.640
C	1.200	1.400
D	0.890	1.030
E	1.780	2.050
F	0.450	0.600
G	0.013	0.100
H	0.900	1.110
J	0.090	0.180
K	0.370	0.510

Note:

1. Halogen free ,EMC
2. Pb free solder
3. Lead thickness solder plating
4. Lead frame CAC-5
5. Other Tolerance ± 0.05
6. Dimensions are exclusive of Burrs Mold Flash and Tie Bar extrusions
7. Unit : mm

PACKAGING OF DIODE

REEL PACK

PACKAGE	PACKING CODE	REEL (EA)	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOT-23/-3L	-T	3,000	---	---	178	440*440*240	180,000	8.0

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