

Silicon NPN SMD triode

1: base 2: emitter 3: collector

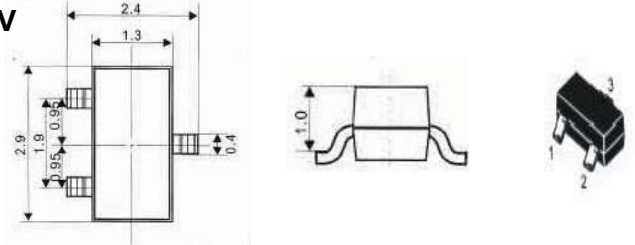
encapsulation mode: SOT-23

Small and medium-sized power amplifier

P/N suffix V means AEC-Q101 qualified, e.g:MMBT4401V

P/N suffix V means Halogen-free

Outline example



Type	Marking
MMBT4401	2X

Maximum ratings(Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Breakdown Voltage	VCBO	60	V
Collector-Emitter Breakdown Voltage	VCEO	40	V
Emitter-Base Breakdown Voltage	VEBO	6	V
Collector Current	IC	100	mA
Collector Power Dissipation	Pc	200	mW
Junction Temperature	TJ	150	°C
Storage Temperature	Tstg	-65~150	°C

Electrical Characteristics (Ta=25°C unless otherwise noted)

Parameter	Symbol	Test Condition	Min	Max	Unit
Collector-Base Breakdown Voltage	VCBO	IC=100uA IE=0	60		V
Collector-Emitter Breakdown Voltage	VCEO	IC=1mA IB=0	40		V
Emitter-Base Breakdown Voltage	VEBO	IE=100uA IC=0	6		V
Collector Cutoff Current	ICBO	VCB=40V IE=0		100	nA
Collector Cutoff Current	ICEX	VCB=35V VEB(off) =4V		100	nA
Emitter Cutoff Current	IEBO	VCE=5V IB=0		100	nA
DC Current Gain	HFE(1)	VCE=1V IC=10mA	80		
	HFE(2)	VCE=1V IC=150mA	100	300	
	HFE(3)	VCE=2V IC=500mA	40		
Collector-Emitter Saturation Voltage	VCE(sat)	IC=500mA IB=50mA		0.8	V
		IC=150mA IB=15mA		0.4	V
Collector-Base Saturation Voltage	VBE(sat)	IC=500mA IB=50mA		1.2	V
		IC=150mA IB=15mA		1.0	V
transition frequency	fT	VCE=10V IC=20mA f=100MHz	250		MHz

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