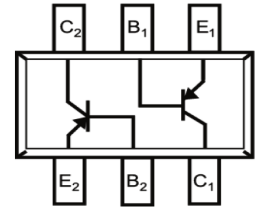


Dual NPN Small Signal Surface Mount Transistor



Features:

- Epitaxial planar die construction.
- Complementary NPN type available MMDT5401.
- Ultra-small surface mount package.



SOT-363

Application:

- Dual NPN small signal surface mount transistor.

Maximum Rating @ TA = 25°C unless otherwise specified

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V _{CB0}	180	V
Collector-Emitter Voltage	V _{CEO}	160	V
Emitter-Base Voltage	V _{EBO}	6	V
Collector Current -Continuous	I _C	200	mA
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Junction and Storage Temperature	T _J , T _{stg}	-55 to+150	°C

Electrical Characteristics @ TA = 25°C unless otherwise specified

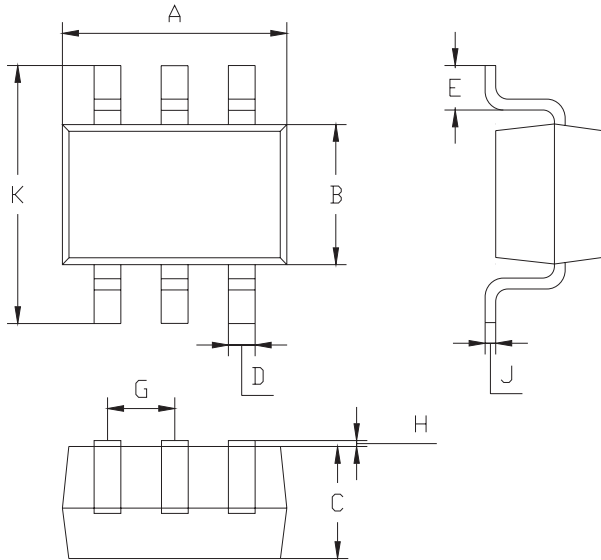
Parameter	Symbol	Conditions	Min.	Max.	Unit
Collector-base breakdown voltage	V _{(BR)CB0}	I _C =-100μA, I _E =0	180	-	V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	160	-	V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E =-10μA, I _C =0	6	-	V
Collector cut-off current	I _{CB0}	V _{CB} =120V, I _E =0	-	50	nA
Emitter cut-off current	I _{EBO}	V _{EB} =4V, I _C =0	-	50	nA
DC current gain	h _{FE}	V _{CE} =5V I _C =1.0mA V _{CE} =5V I _C =10mA V _{CE} =5V I _C =50mA	80 80 30	- 250 -	-
Collector-emitter saturation voltage	V _{CE(sat)}	I _C =10mA, I _B =1mA I _C =50mA, I _B =5mA	-	0.15 0.2	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C =10mA, I _B =1mA I _C =50mA, I _B =5mA	- -	1 1	V
Transition Frequency	f _T	V _{CE} =10V I _C =10mA f=100MHz	100	300	MHz
Output Capacitance	C _{obo}	V _{CB} =10V, f=1.0MHz, I _E =0	-	6	pF
Noise Figure	NF	V _{CE} =5V, f=1.0kHz, I _C =200μA R _g =1.0kΩ	-	8	dB

Dual NPN Small Signal Surface Mount Transistor



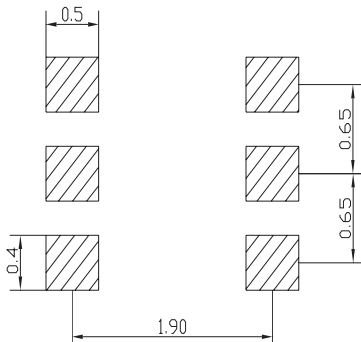
Package Outline

Plastic surface mounted package



SOT-363		
Dim.	Min.	Max.
A	1.8	2.2
B	1.15	1.35
C	1 Typical	
D	0.1	0.3
E	0.25	0.4
G	0.65 Typical	
H	0.02	0.1
J	0.1 Typical	
K	2.1	2.3
All Dimensions in mm		

Soldering Footprint



Dimensions : Millimetres

Part Number Table

Description	Part Number
Transistor, Dual NPN, 160V, 200mA, SOT-363	MMDT5551-7-F

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