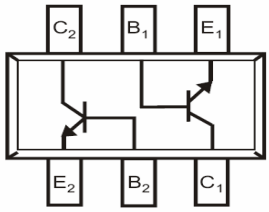
Dual NPN Small Signal Surface Mount Transistor MMDT5551

FEATURES

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

Lead-free



SOT-363

APPLICATIONS

- Dual NPN small signal surface mount transistor

ORDERING INFORMATION

Type No.	Marking	Package Code
MMDT5551	K4N	SOT-363

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Unit**
V_{CBO}	Collector-Base Voltage	180	V
V_{CEO}	Collector-Emitter Voltage	160	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	200	mA
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	625	℃/W
T_j, T_{stg}	Junction and Storage Temperature	-55 to+150	℃

Dual NPN Small Signal Surface Mount Transistor MMDT5551

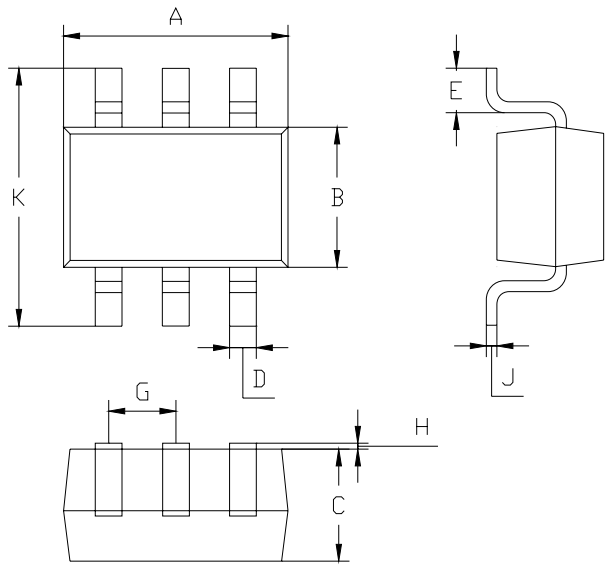
ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	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_{CBO}	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	80	-	-
		V_{CE}=5V I_C=10mA	80	250	
		V_{CE}=5V I_C=50mA	30	-	
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	-	8.0	dB

Dual NPN Small Signal Surface Mount Transistor MMDT5551

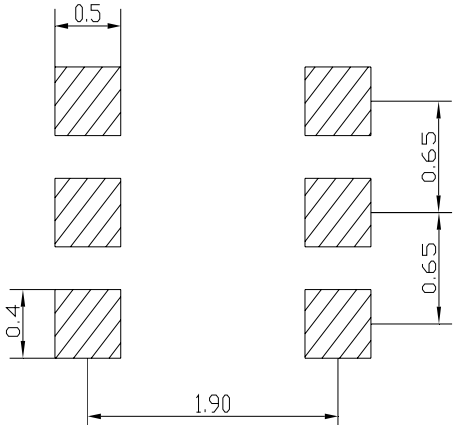
PACKAGE OUTLINE

Plastic surface mounted package SOT-363



SOT-363		
Dim	Min	Max
A	1.8	2.2
B	1.15	1.35
C	1.0Typical	
D	0.10	0.30
E	0.25	0.40
G	0.65Typical	
H	0.02	0.10
J	0.1Typical	
K	2.1	2.3
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMDT5551	SOT-363	3000/Tape&Reel