MMDT4403TB6

DUAL PNP GENERAL PURPOSE SWITCHING TRANSISTOR

VOLTAGE 40 Volt **POWER** 200 mWatt

FEATURES

- PNP epitaxial silicon, planar design
- Collector-emitter voltage V_{CE} = -40V
- Collector current I_C = -500mA
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : SOT-563, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0026 grams
- Marking : TZ

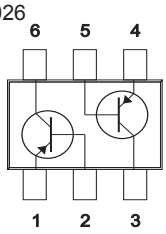
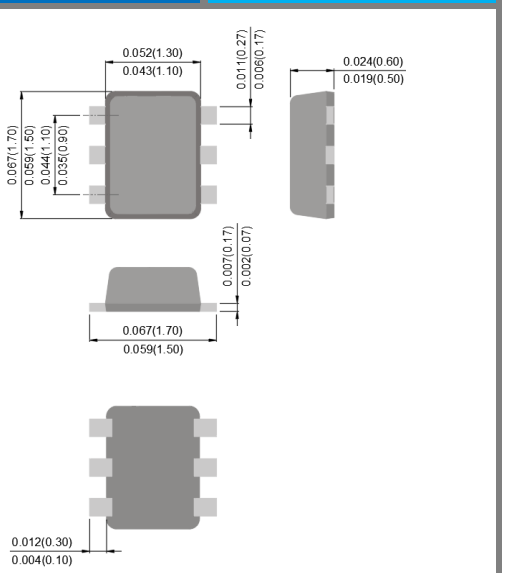


Fig.53

SOT-563 Dimension Unit: inch(mm)



ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Collector - Emitter Voltage	V_{CEO}	-40	V
Collector - Base Voltage	V_{CBO}	-40	V
Emitter - Base Voltage	V_{EBO}	-5.0	V
Collector Current - Continuous	I_C	-500	mA

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Max Power Dissipation (Note 1)	P_{TOT}	200	mW
Thermal Resistance , Junction to Ambient	$R\theta_{JA}$	625	^{O}C/W
Junction Temperature	T_J	-55 to 150	^{O}C
Storage Temperature	T_{STG}	-55 to 150	^{O}C

Note 1: Transistor mounted on FR-4 board 70 x 60 x 1mm.

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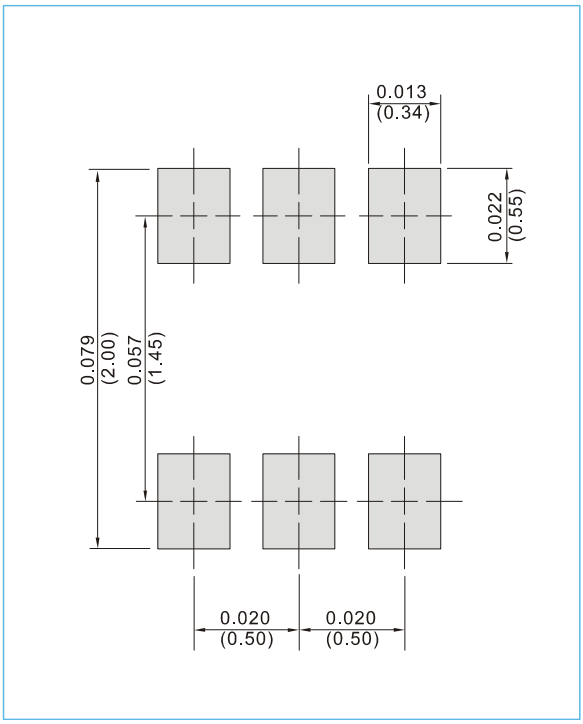
ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Collector - Emitter Breakdown Voltage	$V_{(BR)CEO}$	IC=-1.0mA, IB=0	-40	-	-	V
Collector - Base Breakdown Voltage	$V_{(BR)CBO}$	IC=-100uA, IE=0	-40	-	-	V
Emitter - Base Breakdown Voltage	$V_{(BR)EBO}$	IE=-100uA, IC=0	-5.0	-	-	V
Base Cutoff Current	I_{BL}	VCE=-35V, VEB=-0.4V	-	-	-100	nA
Collector Cutoff Current	I_{CEX}	VCE=-35V, VEB=-0.4V	-	-	-100	nA
DC Current Gain (Note 2)	h_{FE}	IC=-0.1mA, VCE=-1.0V IC=-1.0mA, VCE=-1.0V IC=-10mA, VCE=-1.0V IC=-150mA, VCE=-2.0V IC=-500mA, VCE=-2.0V	30 60 100 90 20	- - - - -	- - - 300 -	-
Collector - Emitter Saturation Voltage (Note 2)	$V_{CE(SAT)}$	IC=-150mA, IB=-15mA IC=-500mA, IB=-50mA	-	-	-0.40 -0.75	V
Base - Emitter Saturation Voltage (Note 2)	$V_{BE(SAT)}$	IC=-150mA, IB=-15mA IC=-500mA, IB=-50mA	0.75 -	- -	-0.95 -1.30	V
Collector - Base Capacitance	C_{CBO}	VCB=-5V, IE=0, f=1MHz	-	-	6.5	pF
Emitter - Base Capacitance	C_{EBO}	VCB=-0.5V, IC=0, f=1MHz	-	-	30	pF
Current Gain - Bandwidth Product	F_T	VCE=-10V, IC=-20mA, f=100MHz	200	-	-	MHz
Delay Time	td	VCC=-30V,VBE=-2.0V, IC=-150mA,IB1=-15mA	-	-	15	ns
Rise Time	tr	VCC=-30V,VBE=-2.0V, IC=-150mA,IB1=-15mA	-	-	20	ns
Storage Time	ts	VCC=-30V,IC=-150mA IB1=IB2=-15mA	-	-	225	ns
Fall Time	tf	VCC=-30V,IC=-150mA IB1=IB2=-15mA	-	-	30	ns

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MOUNTING PAD LAYOUT

SOT-563 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 4K per 7" plastic Reel

  T/R - 10K per 13" plastic Reel

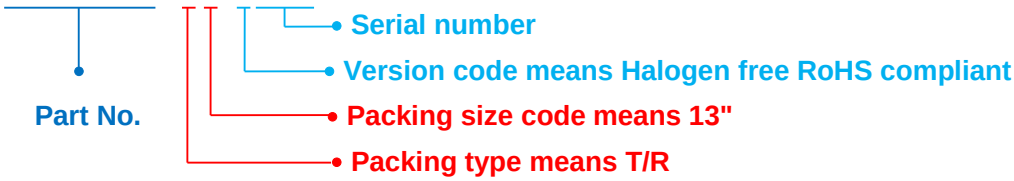
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Part No._packing code_Version

MMDT4403TB6_R1_00001
MMDT4403TB6_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code X		Serial number XXXX
Packing type	1st Code	Packing size code	2nd Code	HSF Level	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	Halogen free RoHS compliant	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS compliant	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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