



RB501V-40TW

SURFACE MOUNT SCHOTTKY DIODES

VOLTAGE 45 Volts **CURRENT** 100 mA

FEATURES

- Extremely Fast Switching Speed
- Surface mount package ideally suited for automatic insertion
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOT-363, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Apprx. Weight: 0.0002 ounce, 0.0058 gram
- Marking : 140

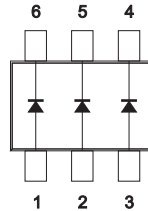
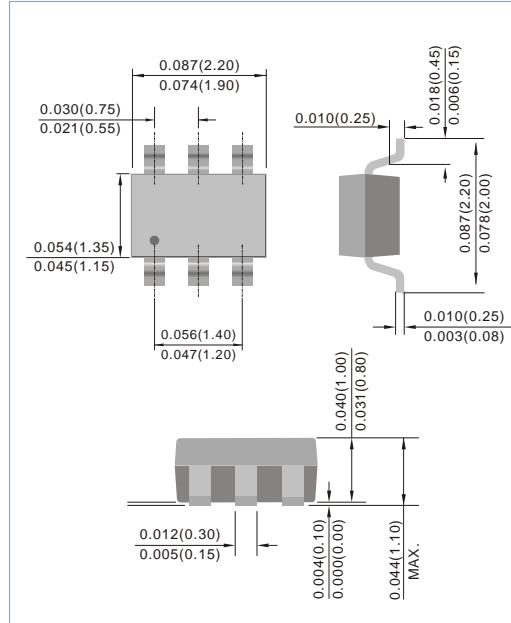


Fig.48

SOT-363 Unit : inch(mm)



ABSOLUTE RATINGS

Parameter	Symbol	Value	Units
Maximum Peak Reverse Voltage	V_{RRM}	45	V
Reverse DC Voltage	V_R	30	V
Maximum Forward Current	$I_{F(AV)}$	0.1	A
Maximum Forward Peak Current (60Hz-1cycle)	I_{FSM}	1	A
Total Power Dissipation ⁽¹⁾	P_{TOT}	0.2	W
Peak Forward Surge Current at t=8.3ms	I_{FSM}	500	mA
Junction Temperature	T_J	-55 to + 125	°C
Storage Temperature	T_{STG}	-55 to + 125	°C

1. FR-4 Board = 70 x 60 x 1mm. Minmum Pad Layout

THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Units
Thermal Resistance, Junction to Ambient ⁽¹⁾	$R_{\theta JA}$	550	°C/W



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ELECTRICAL CHARACTERISTICS ($T_J = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	MIN.	TYP.	MAX.	Units
Reverse Leakage Current(each diode)	I_R	$V_R=10\text{V}$	-	-	10	μA
Forward Voltage(each diode)	V_F	$I_{F1}=10\text{mA}$ $I_{F2}=100\text{mA}$	-	0.26 -	0.34 0.55	V
Total Capacitance(each diode)	C_T	$V_R=10\text{V}, F=1\text{MHz}$	-	-	6	pF

ELECTRICAL CHARACTERISTICS CURVE

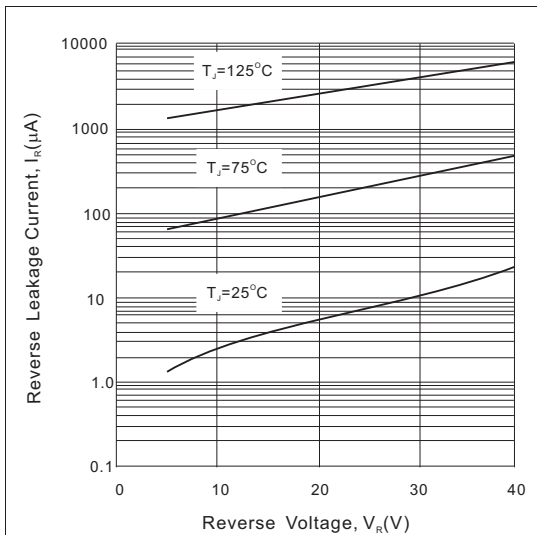


Fig.1-Typical Reverse Leakage

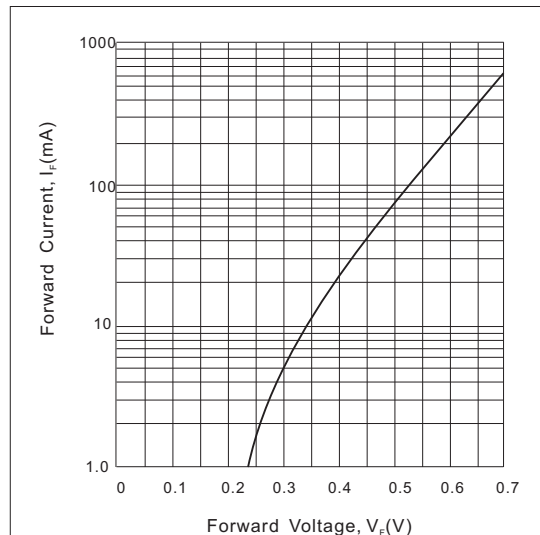


Fig.2-Typical Forward Voltage

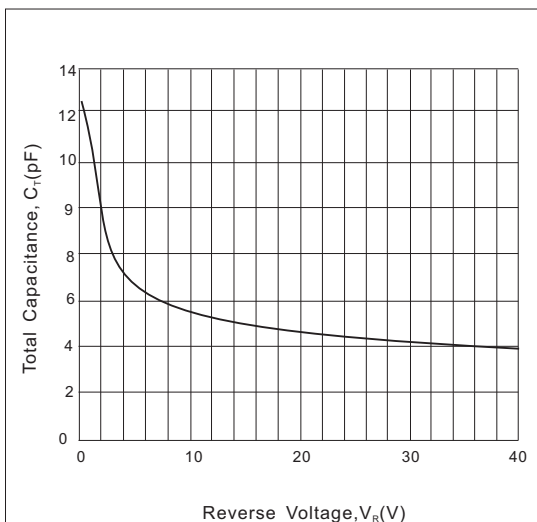
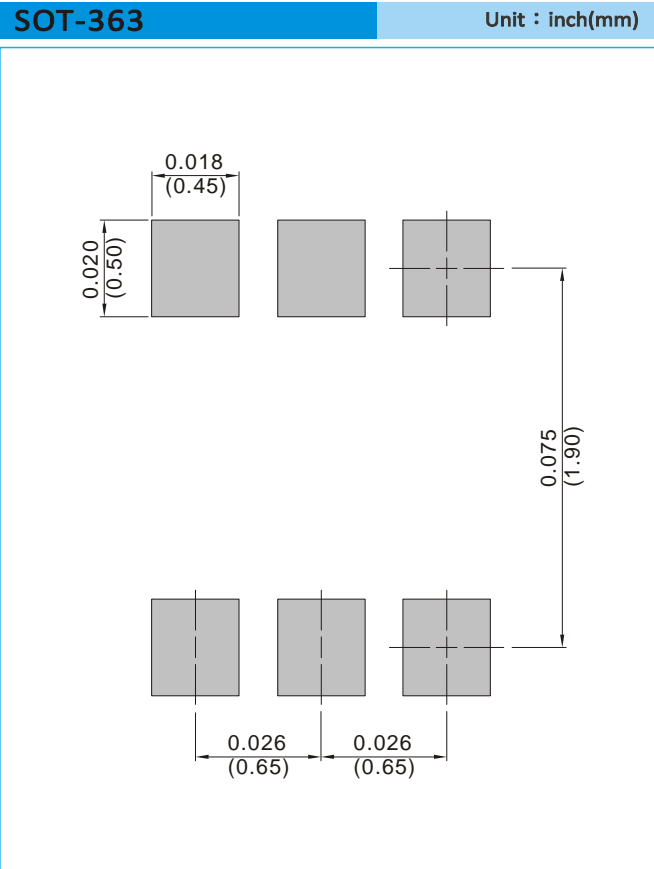


Fig.3-Typical Capacitance



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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 10K per 13" plastic Reel
T/R - 3K per 7" plastic Reel



RB501V-40TW

Part No_packing code_Version

RB501V-40TW_R1_00001

RB501V-40TW_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	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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