



Micro Commercial Components



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# RB500V-40

## 0.1 Amp Schottky Barrier Rectifier 40 Volts

### Features

- Halogen free available upon request by adding suffix "-HF"
- Marking: 2
- Lead Free Finish/RoHS Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Small Surface Mounting Type
- Low Reverse Current and Low Forward Voltage
- High Reliability
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

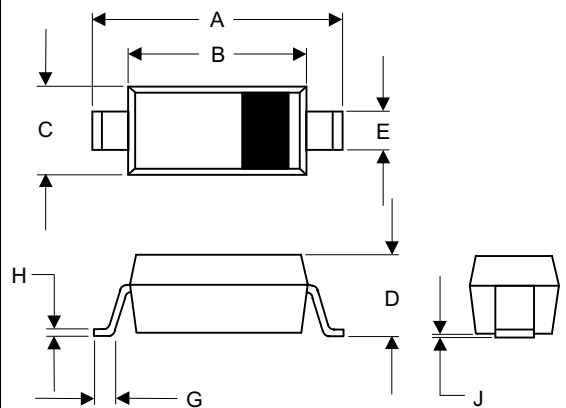
### Maximum Ratings

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	45	V
DC Reverse Voltage	$V_R$	40	V
Mean Rectifying Current	$I_O$	100	mA
Peak Forward Surge Current	$I_{FSM}$	1	A
Junction Temperature	$T_J$	125	°C
Storage Temperature	$T_{STG}$	-40 to +125	°C

### Electrical Characteristics @ 25°C Unless Otherwise Specified

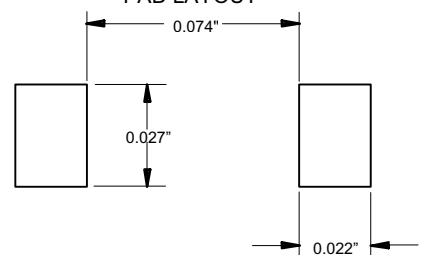
Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage @ $I_F=10mA$	$V_F$	---	---	0.45	V
Reverse Current @ $V_R=10V$	$I_R$	---	---	1	uA
Capacitance Terminal @ $V_R=10V, f=1MHz$	$C_T$	---	6.0	---	pF

### SOD-323



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

### SUGGESTED SOLDER PAD LAYOUT



# RB500V-40

● **Electrical characteristic curves (Ta = 25°C)**

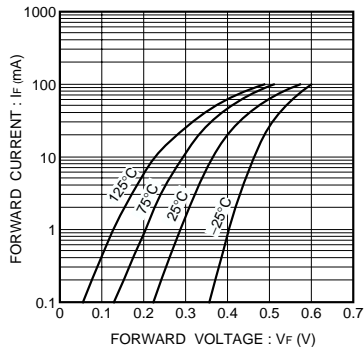


Fig. 1 Forward characteristics

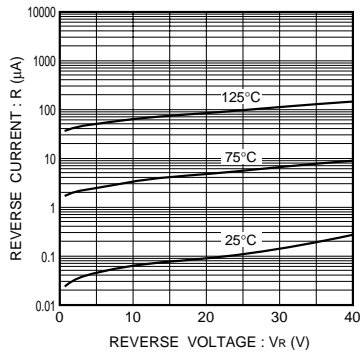


Fig. 2 Reverse characteristics

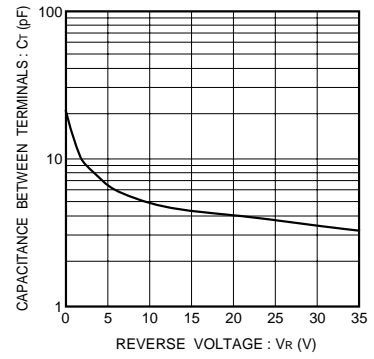


Fig. 3 Capacitance between terminals characteristics

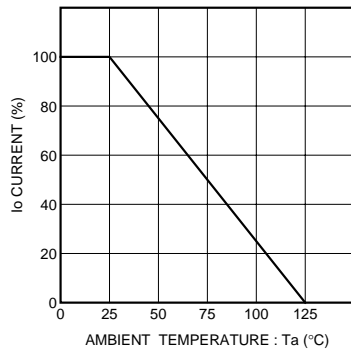


Fig. 4 Derating curve (mounting on glass epoxy PCBs)



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### Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" suffix for halogen free, eg. Part Number-TP-HF

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