

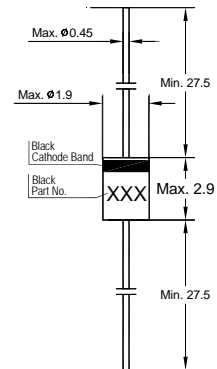
# RB441Q-40

## SILICON EPITAXIAL PLANAR TYPE SCHOTTKY BARRIER DIODES

for low current rectification

### Features

- Low forward rise voltage ( $V_F$ )
- Small pitch enables insertion on PCBs
- Glass sealed envelope for high reliability



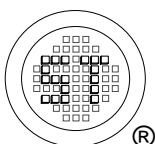
Glass Case DO-34  
Dimensions in mm

### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	40	V
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	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 40 to + 125	$^\circ\text{C}$

### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$	$V_F$	- -	0.34 0.55	V
Reverse Current at $V_R = 40\text{ V}$	$I_R$	-	100	$\mu\text{A}$
Terminal Capacitance at $V_R = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	6	-	pF



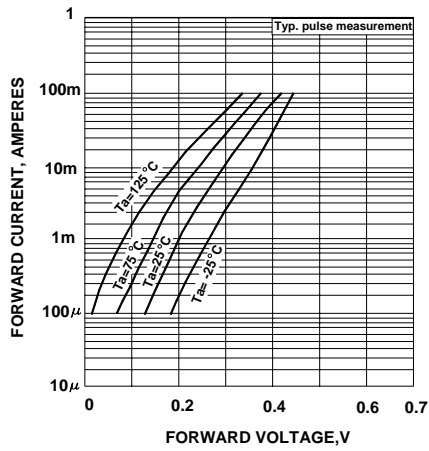
**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company  
listed on the Hong Kong Stock Exchange, Stock Code: 724)

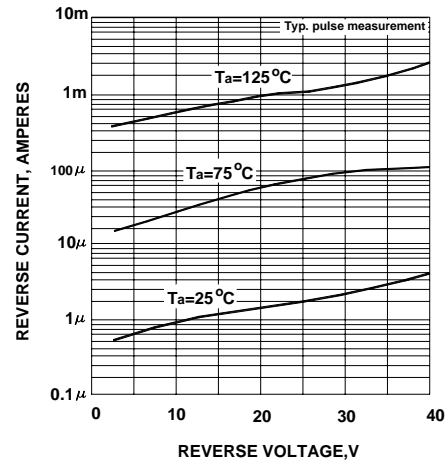


Dated : 25/06/2007

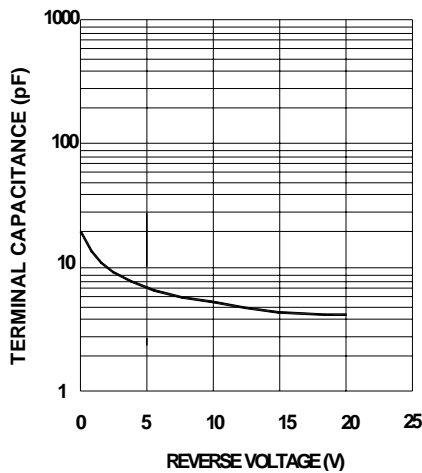
**FORWARD CHARACTERISTICS**



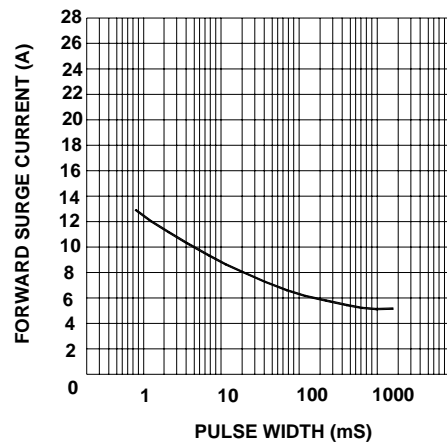
**REVERSE CHARACTERISTICS**



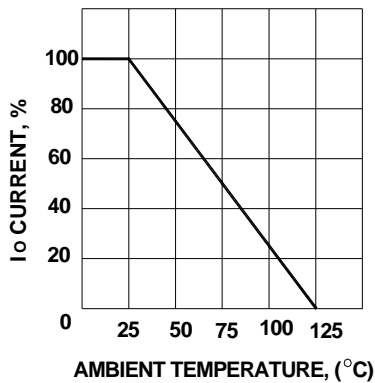
**TERMINAL CAPACITANCE CHARACTERISTICS**



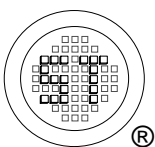
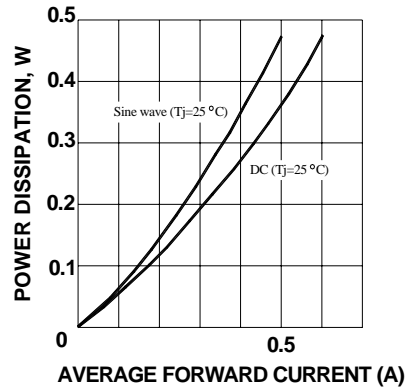
**FORWARD SURGE CURRENT CHARACTERISTIC**



**DERATING CURVE**  
(mounting on glass epoxy PCBs)



**MEAN RECTIFYING CURRENT CHARACTERISTICS**



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098