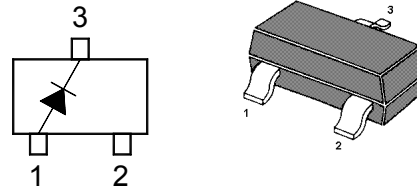


# BAT400D

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



1. ANODE 3. CATHODE

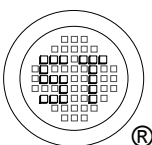
Marking Code: **PK**  
SOT-23 Plastic Package

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
Working Peak Reverse Voltage	$V_{RWM}$	40	V
DC Blocking Voltage	$V_R$	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Current	$I_O$	0.5	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	3	A
Power Dissipation	$P_d$	480	mW
Typical Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	286	$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_{opr}, T_{stg}$	-40 to +125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$ at $I_F = 500\text{ mA}$	$V_F$	-	-	0.3 0.55	V
Reverse Breakdown Voltage at $I_R = 1\text{ mA}$	$V_{(BR)R}$	40	-	-	V
Reverse Current at $V_R = 10\text{ V}$ at $V_R = 30\text{ V}$	$I_R$	-	-	30 50	$\mu\text{A}$
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$ at $V_R = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$	-	125 20	-	pF



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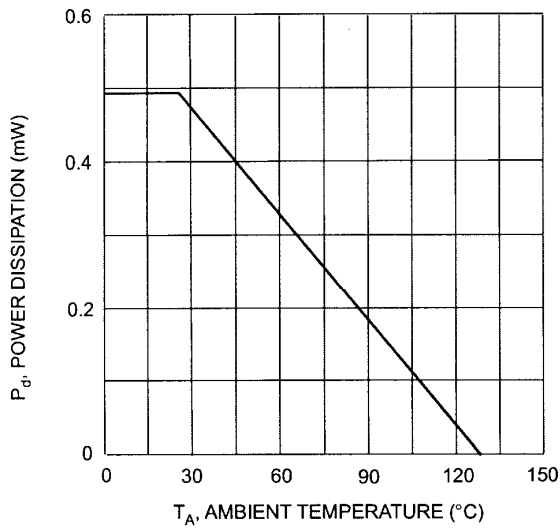


Fig. 1 Forward Current Derating Curve

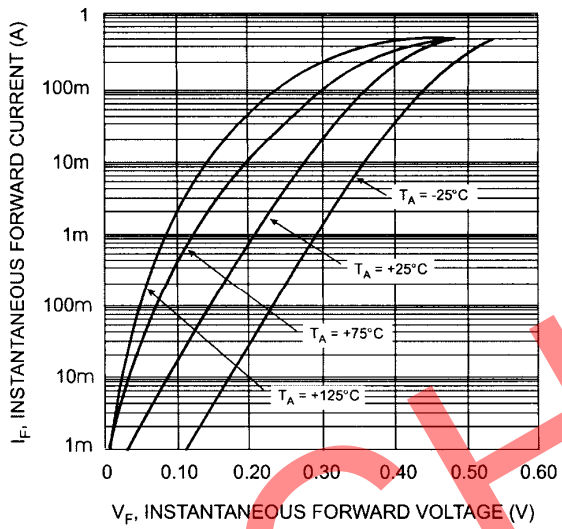


Fig. 2 Typical Forward Characteristics

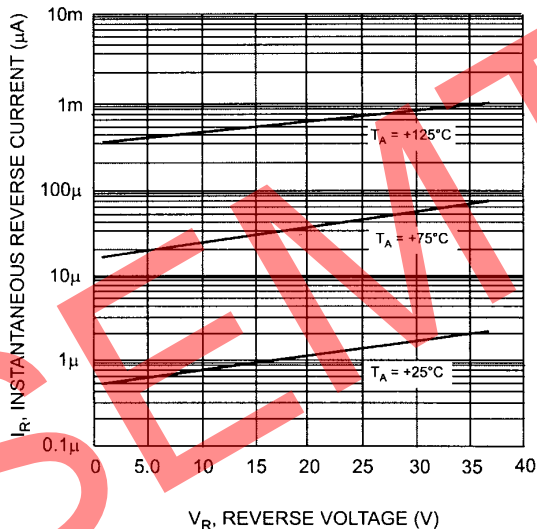


Fig. 3 Typical Reverse Characteristics

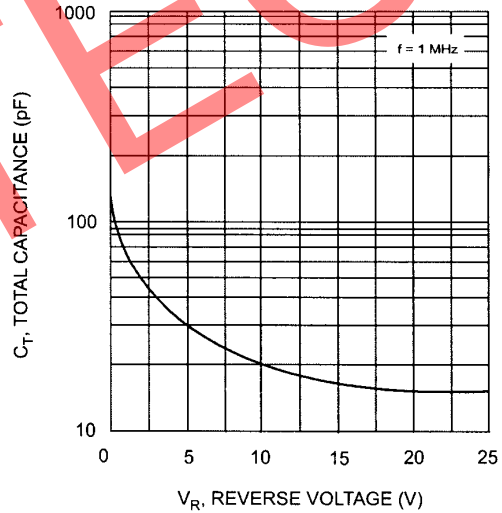
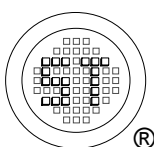


Fig. 4 Typical Total Capacitance vs. Reverse Voltage



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