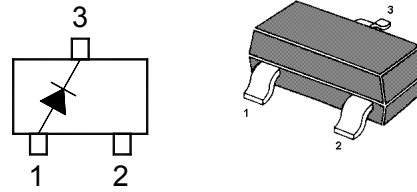


BAT400D

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER



1. ANODE 3. CATHODE

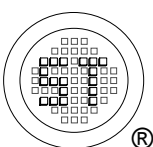
Marking Code: **PK**
SOT-23 Plastic Package

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	μA
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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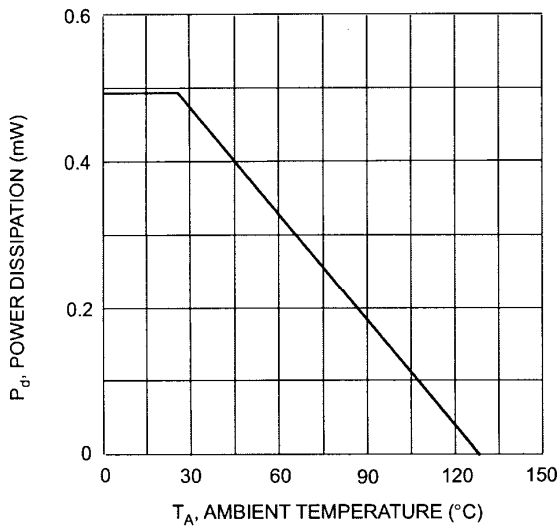


Fig. 1 Forward Current Derating Curve

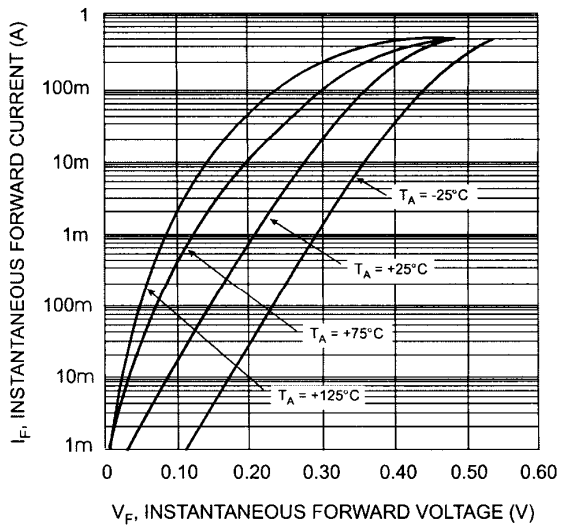


Fig. 2 Typical Forward Characteristics

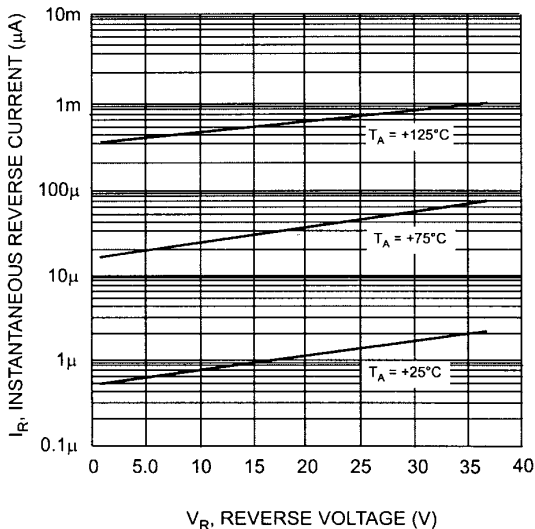


Fig. 3 Typical Reverse Characteristics

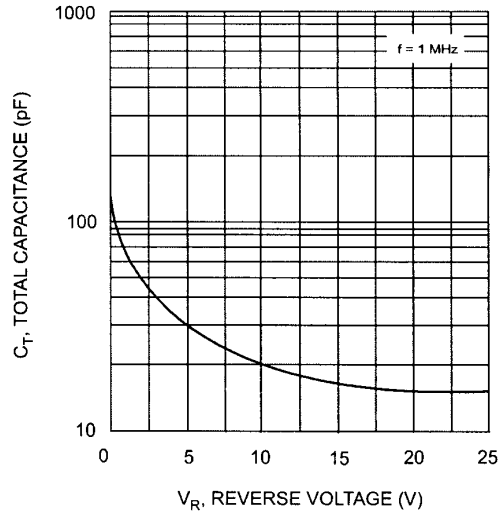
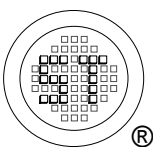


Fig. 4 Typical Total Capacitance vs. Reverse Voltage



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