

Small Signal Product

## Hermetically Sealed Glass Fast Switching Schottky Barrier Diode

**FEATURES**

- Low forward voltage drop
- Through-hole device type mounting
- Hermetically sealed glass
- Compression bonded construction
- Solder hot dip tin (Sn) lead finish
- All external surfaces are corrosion resistant and leads are readily solderable


**DO-35**

Hermetically Sealed Glass

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P <sub>D</sub>	200	mW
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	V
Maximum DC Blocking Voltage	V <sub>R</sub>	30	V
Average Forward Rectified Current	I <sub>F(AV)</sub>	200	mA
Peak Forward Surge Current	I <sub>FSM</sub>	4	A
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-65 to +125	°C

PARAMETER		SYMBOL	MIN	MAX	UNIT
Breakdown Voltage		B <sub>V</sub>	30	-	V
Forward Voltage Drop All Types	BAT42	V <sub>F</sub>	I <sub>R</sub> =100μA	-	1.00
			I <sub>F</sub> =200mA	-	0.40
			I <sub>F</sub> =10mA	-	0.65
	BAT43		I <sub>F</sub> =200mA	-	1.00
			I <sub>F</sub> =2mA	0.26	0.33
			I <sub>F</sub> =15mA	-	0.45
Maximum Peak Reverse Current		I <sub>R</sub>	500		nA
Junction Capacitance		C <sub>J</sub>	7 (Typ)		pF
Reverse Recovery Time		t <sub>rr</sub>	5 (Typ)		ns

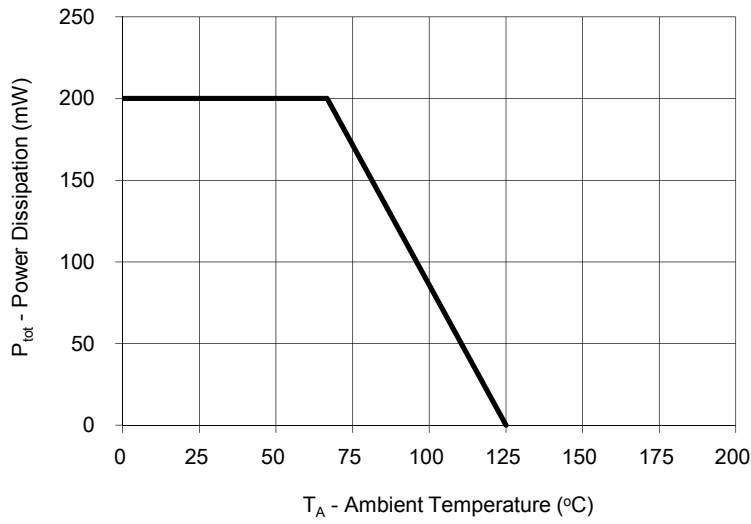
 Note 1: Reverse recovery test conditions: I<sub>F</sub>=I<sub>R</sub>=10mA, I<sub>RR</sub>=1mA, R<sub>L</sub>=100Ω

**Small Signal Product**

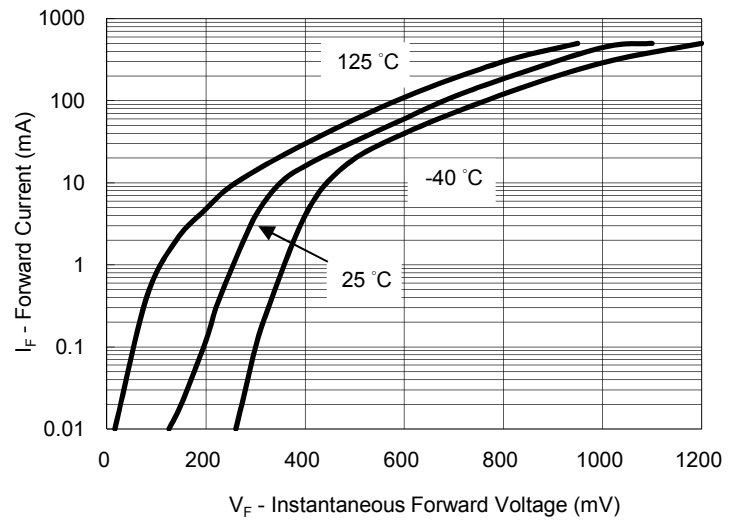
**RATINGS AND CHARACTERISTICS CURVES**

( $T_A=25^\circ\text{C}$  unless otherwise noted)

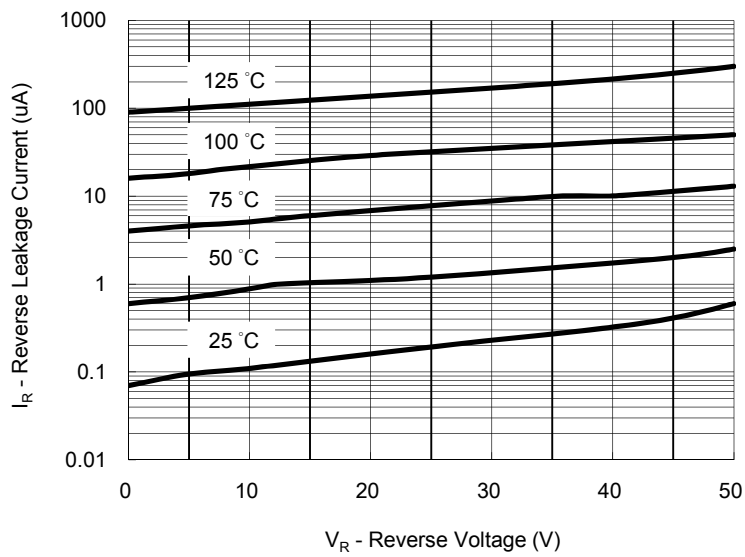
**Fig.1 Admissible Power Dissipation VS. Ambient Temperature**



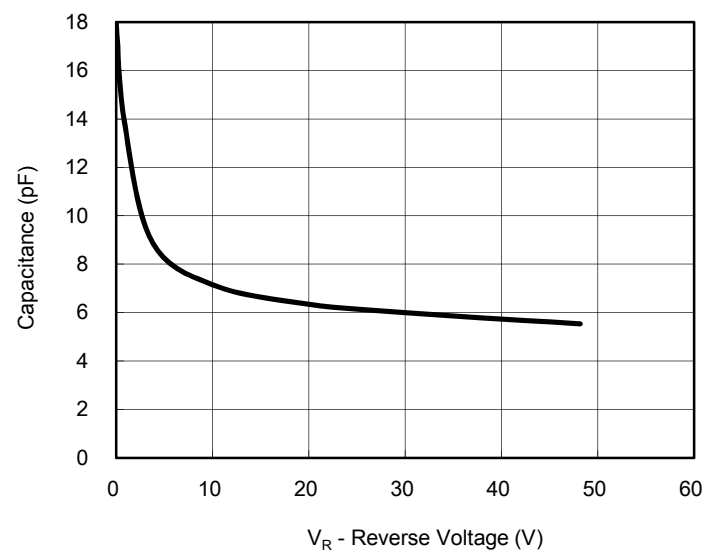
**Fig. 2 Typical Reverse Characteristics**



**Fig. 3 Typical Reverse Characteristics**



**Fig. 4 Typical Capacitance VS. Reverse Applied Voltage**



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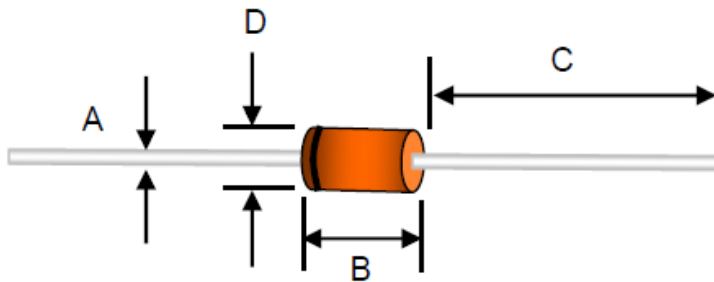
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BAT4x (Note1)	-xx	R0	G	DO-35	10K / 14" Reel
		A0			5K / Box ( Ammo)

Note 1: "x" is Device Code from "2" thru "3".

Note 2: Part No. Suffix „-xx “ would be used for special requirement

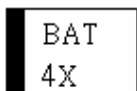
EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BAT42 R0G	BAT42		R0	G	Multiple manufacture source Green compound
BAT42-L0 R0G	BAT42	-L0	R0	G	Define manufacture source Green compound

PACKAGE OUTLINE DIMENSION



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	0.34	0.60	0.013	0.024
B	2.90	5.08	0.114	0.200
C	25.40	38.10	1.000	1.500
D	1.30	2.28	0.051	0.090

MARKING DIAGRAM



"x" is Device Code from "2" thru "3".

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