Small Signal Product

Hermetically Sealed Glass Fast Switching Schottky Barrier Diode

FEATURES

- Low forward voltage drop
- Through-hole device type mounting
- Hermetically sealed glasss
- 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

Pb-Free

RoHS COMPLIANT

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25℃ unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Power Dissipation	P_D	200	mW
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Maximum DC Blocking Voltage	V_R	30	V
Average Forward Rectified Current	$I_{F(AV)}$	200	mA
Peak Forward Surge Current	I_{FSM}	4	A
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +125	°C

PARAMETER			SYMBOL	MIN	MAX	UNIT
Breakdown Voltage		I_R=100μA	B_V	30	-	V
Forward Voltage Drop All Types	BAT42	I_F=200mA	V_F	-	1.00	V
		I_F=10mA		-	0.40	
		I_F=50mA		-	0.65	
	BAT43	I_F=200mA		-	1.00	
		I_F=2mA		0.26	0.33	
		I_F=15mA		-	0.45	
Maximum Peak Reverse Current		V_R=25V	I_R	500		nA
Junction Capacitance		V_R=1V, f=1.0MHz	C_J	7 (Typ)		pF
Reverse Recovery Time		(Note 1)	t_{rr}	5 (Typ)		ns

Note 1: Reverse recovery test conditions: I_F=I_R=10mA, I_{RR}=1mA, R_L=100Ω

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RATINGS AND CHARACTERISTICS CURVES

(T_A=25℃ unless otherwise noted)

Fig.1 Admissible Power Dissipation VS. Ambient Temperature

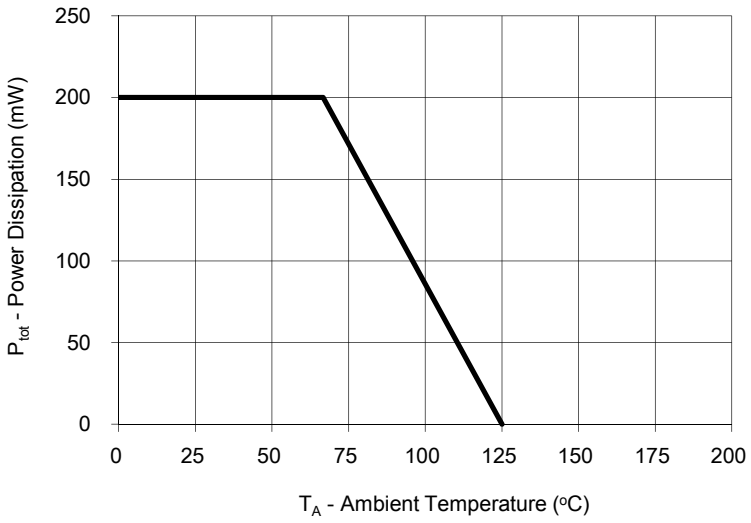


Fig. 2 Typical Reverse Characteristics

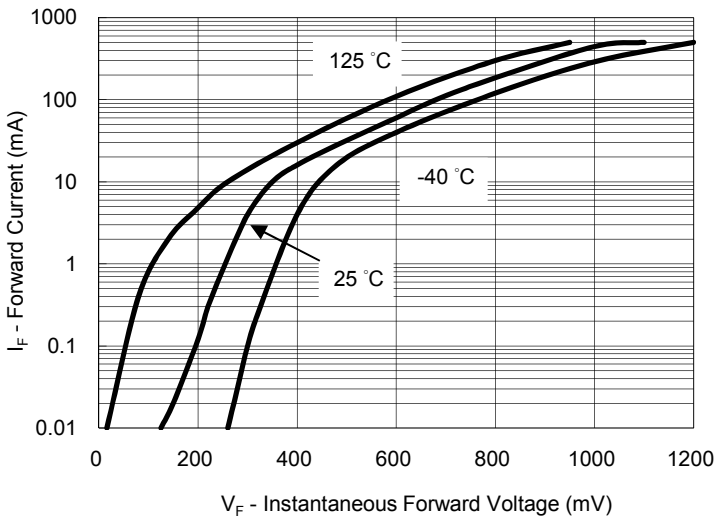


Fig. 3 Typical Reverse Characteristics

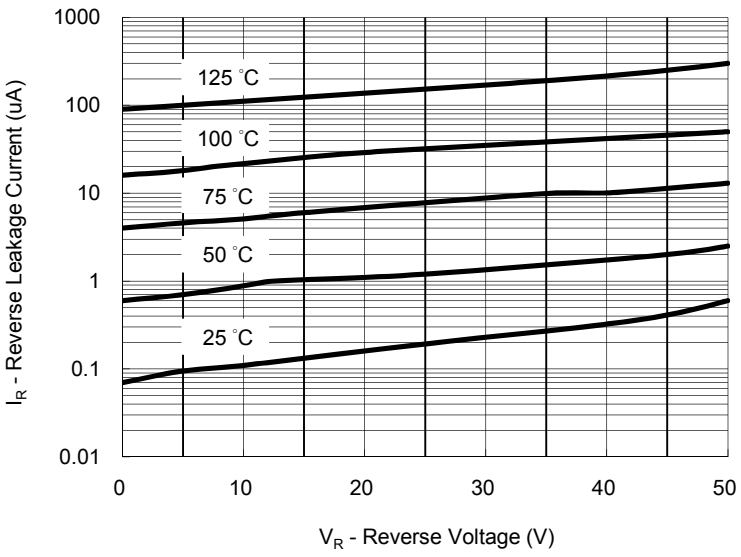
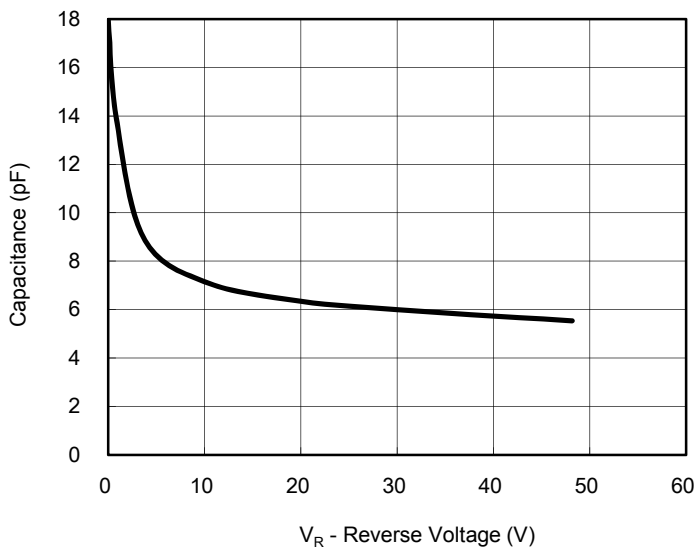


Fig. 4 TypicalCapacitance VS. Reverse Applied Voltage



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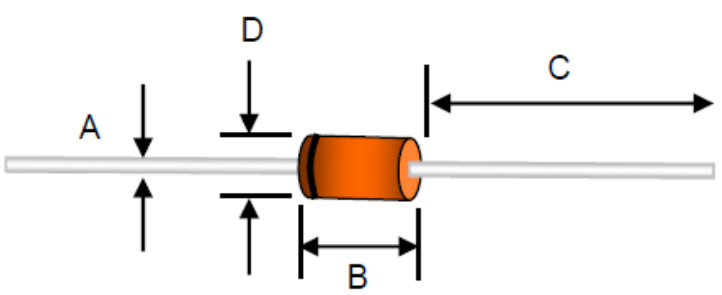
ORDERING INFORMATION					
PART NO.	PART NO. SUFFIX (Note 2)	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
BAT4x (Note1)	-xx	R0	G	DO-35	10K / 14" Reel
		A0			5K / Box (Ammo)

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

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

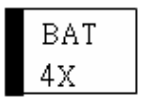
EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
BAT42 R0G	BAT42		R0	G	Multiple manufacture source Green compound
BAT42-L0 R0G	BAT42	-L0	R0	G	Define manufacture source Green compound

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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