LITE-ON SEMICONDUCTORS

BAW56DW

SURFACE MOUNT
FAST SWITCHING DIODE

REVERSE VOLTAGE – 75 Volts
FORWARD CURRENT – 0.15 Ampere

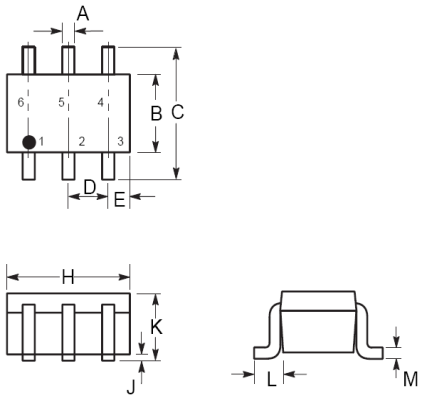
FEATURES

- Fast switching speed
- Ideally suited for automatic insertion
- For general purpose switching applications

MECHANICAL DATA

- Case: SOT-363 Plastic
- Case material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture sensitivity: Level 1 per J-STD-020D
- Lead free in RoHS 2002/95/EC compliant

SOT-363



SOT-363		
Dim.	Min.	Max.
A	0.15	0.35
B	1.15	1.35
C	2.15	2.45
D	0.65 TYP.	
E	0.40 REF.	
H	2.00	2.20
J	0.00	0.10
K	0.90	1.10
L	0.525 REF.	
M	0.08	0.15
Dimensions in millimeter		

Maximum Ratings & Thermal Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Symbol	BAW56DW	Units
Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward @t=1us Surge Current @t=1s	I_{FSM}	2 1	A
Power Dissipation	P_D	200	mW
Thermal Resistance Junction to Ambient	$R_{\Theta JA}$	625	℃/W
Operating Temperature Range	T_J	150	℃
Storage Temperature Range	T_{STG}	-65~+150	℃

Electrical Characteristics @ T_A = 25℃ unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I_R = 2.5uA	V_{BR}	75	--	--	V
Maximum Forward Voltage	I_F = 1mA I_F = 10mA I_F = 50mA I_F = 150mA	V_F	-- -- -- --	-- -- -- --	715 855 1000 1250	mV
Maximum DC Reverse Current at Rated DC Blocking Voltage	V_R = 75V V_R = 20V	I_R	--	--	2.5 0.025	uA
Typical Diode Capacitance	V_R =0V,f=1MHz	C_D	--	--	2	pF
Reverse Recovery time	Irr=1mA, I_R=I_F=10mA R_L=100Ω	trr	--	--	4	ns

REV. 1, Oct-2010, KSYR47

RATING AND CHARACTERISTIC CURVES
BAW56DW

Fig.1 Typical Forward Characteristics

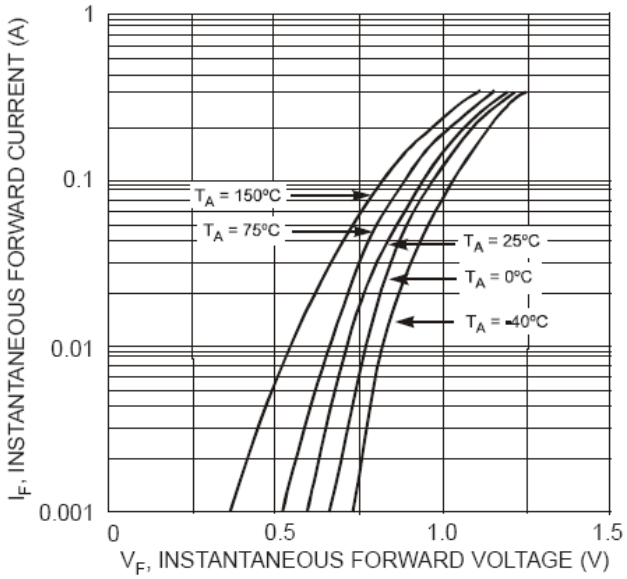


Fig.2 Typical Reverse Characteristics

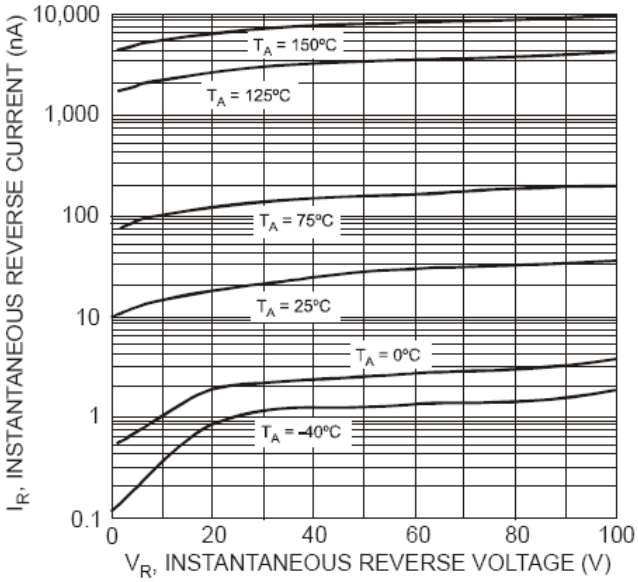


Fig.3 Total Capacitance vs. Reverse Voltage

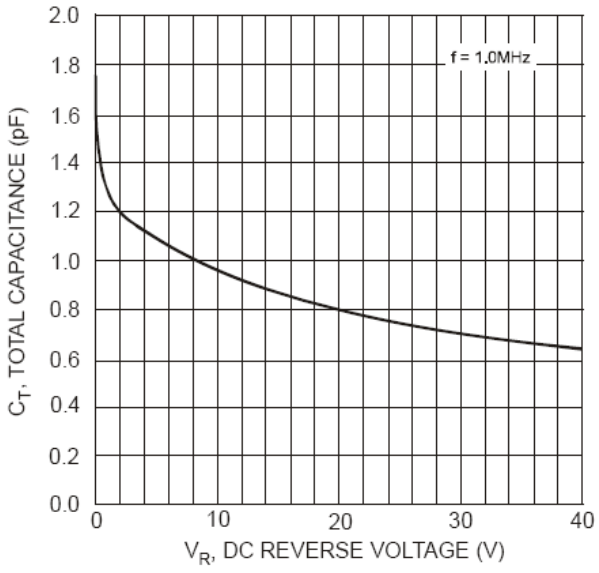
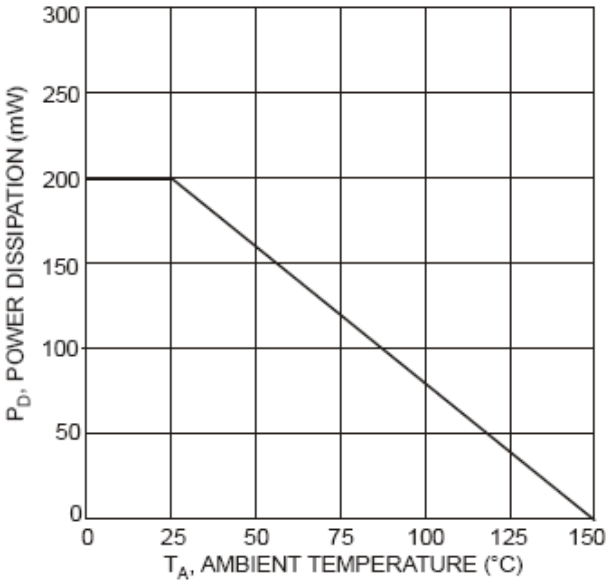
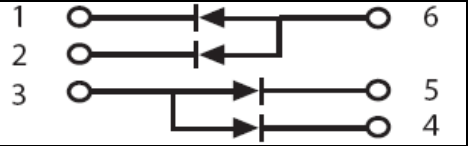


Fig.4 Power Derating Curve



Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
BAW56DW	KJC	

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