

BAW567DW

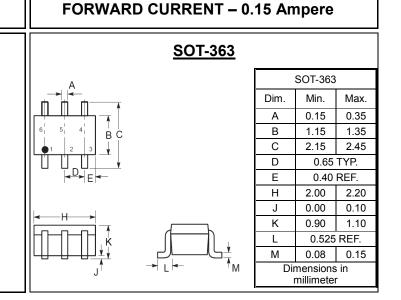
SURFACE MOUNT FAST SWITCHING DIODE

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



REVERSE VOLTAGE – 75 Volts

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

Characteristic	Symbol	BAW567DW	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	Ι _Ο	150	mA
Non-Repetitive Peak Forward@t=1usSurge Current@t=1s	I _{FSM}	2 1	А
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Operating Temperature Range	TJ	150	°C
Storage Temperature Range	T _{STG}	-65~+150	°C

Electrical Characteristics @ $T_A = 25^{\circ}C$ unless otherwise specified

Characteristic	Test Condition	Symbol	Min.	Тур.	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	CD			2	pF
				R	EV. 1, Oct-2010, M	SYR46

RATING AND CHARACTERISTIC CURVES BAW567DW

Fig.1 Typical Forward Characteristics 10,000 1 $I_{\rm R},$ INSTANTANEOUS REVERSE CURRENT (nA) IF, INSTANTANEOUS FORWARD CURRENT (A) = 150°C T_A = 125°C 1,000 0.1 T_A = 150°C 100 T_A = 75°C T_A = 75°C = 25°C ТΔ = 0°C Тд T_A = 25°C 10 $T_A = -40^{\circ}C$ 0.01 $\Gamma_A = 0^{\circ}C$ 1 $T_A = -40^{\circ}C$ 0.001 0.1 0.5 1.0 0 1.5 0 20 40 60 80 100 V_F, INSTANTANEOUS FORWARD VOLTAGE (V) V_R, INSTANTANEOUS REVERSE VOLTAGE (V) Fig.4 Power Derating Curve Fig.3 Total Capacitance vs. Reverse Voltage 300 2.0 1.0MHz 1.8 PD, POWER DISSIPATION (mW) 250 1.6 TOTAL CAPACITANCE (pF) 1.4 200 1.2 1.0 150 0.8 100 0.6 Ĵ 0.4 50 0.2 0.0 0 0 10 20 30 40 100 0 25 50 75 150 125 V_R, DC REVERSE VOLTAGE (V) T_A, AMBIENT TEMPERATURE (°C)

Device Marking :

Device P/N	Marking code	Equivalent Circuit Diagram
BAW567DW	KAC	

Fig.2 Typical Reverse Characteristics





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