



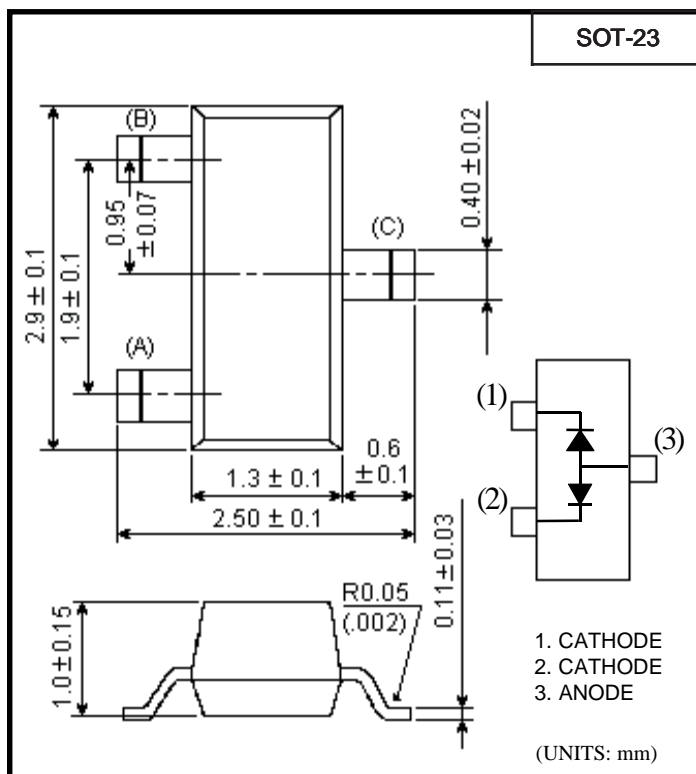
**SURFACE MOUNT, DUAL 1N4148 COMMON ANODE DIODE**

**Absolute Maximum Ratings (Ta=25°C)**

Items	Symbol	Ratings	Unit
Reverse Voltage	VRRM	85	V
Reverse Recovery Time	trr	4	ns
Forward Voltage @ If = 50 mA	VF	1.0	V
Forward Current	IF	215	mA
Junction Temp.	Tj	-55 to 150	°C
Storage Temp.	Tstg	-55 to 150	°C

**Mechanical Data**

Items	Materials
Package	SOT-23
Lead Frame	42 Alloy
Lead Finish	Solder Plating
Bond Wire	Au
Mold Resin	Epoxy
Chip	Silicon



**Electrical Characteristics per Diode (Ta=25°C)**

Ratings	Symbol	Ratings	Unit
Reverse Breakdown Voltage IR= 100uA	VBR	75	V
Repetitive Peak Reverse Voltage	VRRM	85	V
Repetitive Peak Forward Current	IFRM	450	mA
Forward Voltage	VF		mV
IF= 1mA		715	
IF= 10mA		855	
IF= 50mA		1000	
IF= 150mA		1250	
Reverse Current	IR		uA
VR= 75V		1.0	
VR= 25V (Tj= 150°C)		30	
VR= 75V (Tj= 150°C)		50	
Junction Capacitance VR = 0 V, f = 1MHz	Cj	2.0	pF
Reverse Recovery Time IF= IR= 10mA; RL= 100 ohms	trr	4	ns
Thermal Resistance (junction to ambient)	RθJA	500	°C/W

**MAXIMUM RATINGS** (at TA= 25°C unless otherwise noted)

PARAMETER	SYMBOL	CONDITIONS	Max	UNITS
Continuous Forward Current	I <sub>F</sub>	single diode loaded (note 1)	215	mA
		double diode loaded (note 1)	125	
Non-repetitive Peak Forward Current	I <sub>FSM</sub>	square wave, T <sub>j</sub> =25°C prior to surge		
		t=1us	4	Amps
		t=1ms	1	Amps
		t=1s	0.5	Amps
Total Power Dissipation	P <sub>LOT</sub>	T <sub>amb</sub> = 25 °C	250	mW

Note: 1. Device mounted on an FR4 printed-circuit board.

# RATING AND CHARACTERISTIC CURVES ( BAW56 )

FIG. 1 - Maximum permissible continuous forward current as a function of ambient temperature

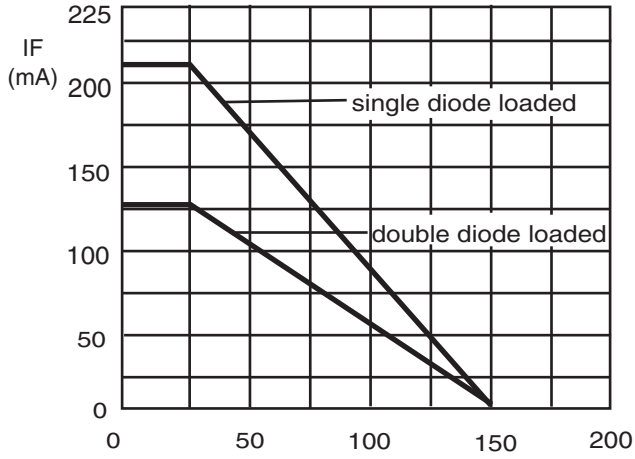


FIG. 2 - Forward current as a function of forward voltage

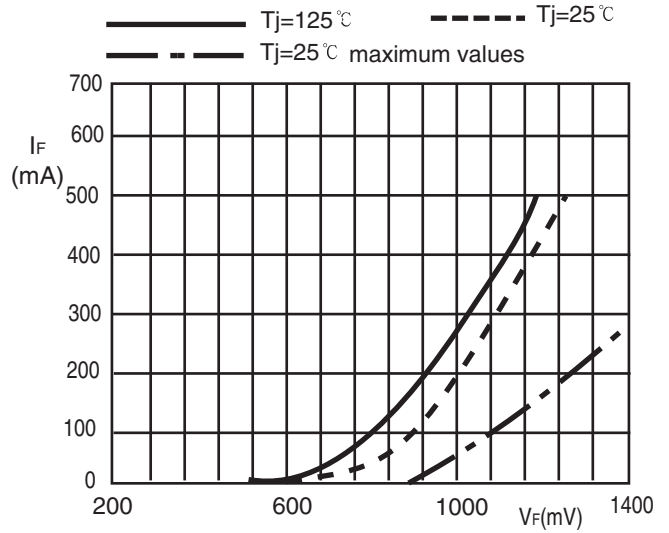


FIG. 3 - Maximum permissible non-repetitive peak forward current as a function of pulse duration

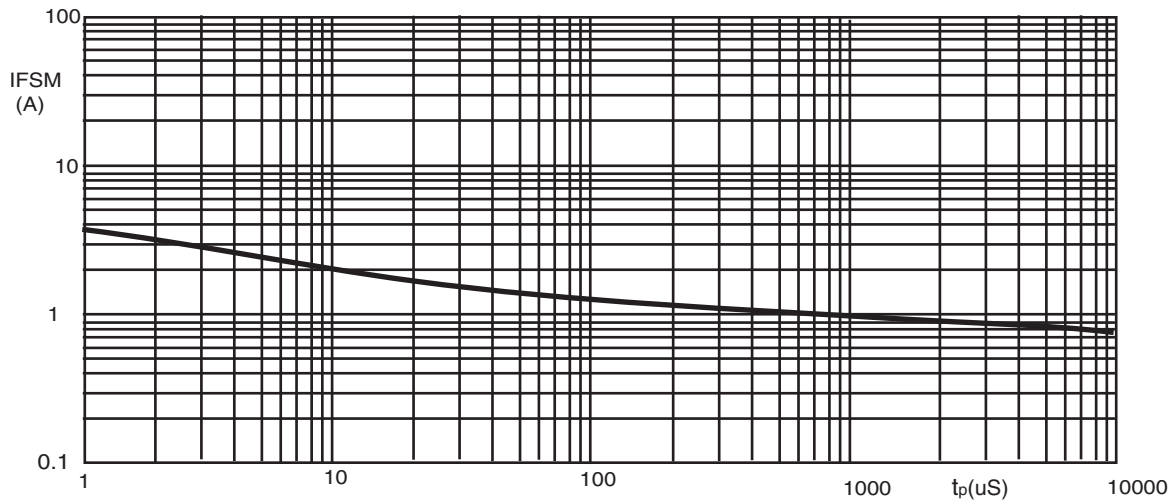


FIG. 4 - Reverse current as a function of junction temperature

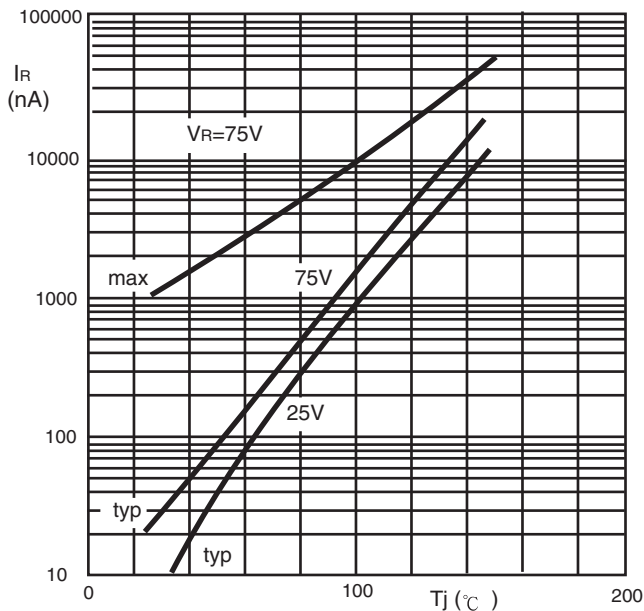
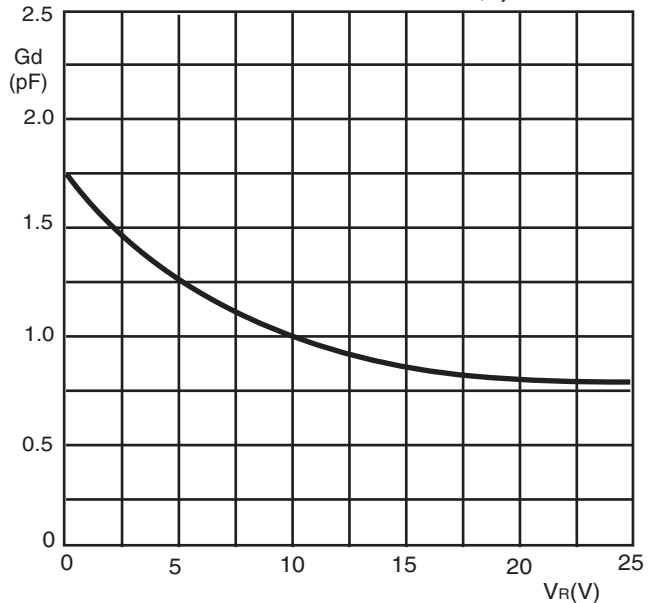


FIG. 5 - Diode capacitance as a function of reverse voltage ; typical values  $f=1\text{MHz}; T_j=25^\circ\text{C}$



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