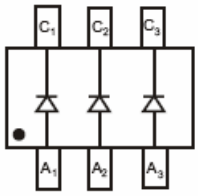
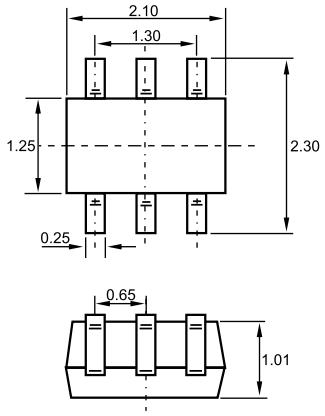
BAS16TW/MMBD4148TW

Switching Diodes



SOT-363



Dimensions in inches and (millimeters)

Features

- ✧ Fast Switching Speed
- ✧ For General Purpose Switching Applications
- ✧ High Conductance

MARKING: BAS16TW KA2· MMBD4148TW KA2

Maximum Ratings @T_A=25℃

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	100	V
Peak Repetitive Peak reverse voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	75	V
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Peak forward surge current @=1.0μs **@=1.0s**	I_{FSM}	2.0 1.0	A
Power Dissipation	Pd	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	625	K/W
Junction temperature	T_j	150	℃
Storage temperature	T_{STG}	-65~+150	℃

Electrical Ratings @T_A=25℃

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	75			V	I_R=10μA
Forward voltage	V_{F1}			0.715	V	I_F=1mA
	V_{F2}			0.855	V	I_F=10mA
	V_{F3}			1.0	V	I_F=50mA
	V_{F4}			1.25	V	I_F=150mA
Reverse current	I_{R1}			1	μA	V_R=75V
	I_{R2}			25	nA	V_R=20V
Capacitance between terminals	C_T			2	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	I_F=I_R=10mA Irr=0.1XI_R,R_L=100Ω

Typical Characteristics

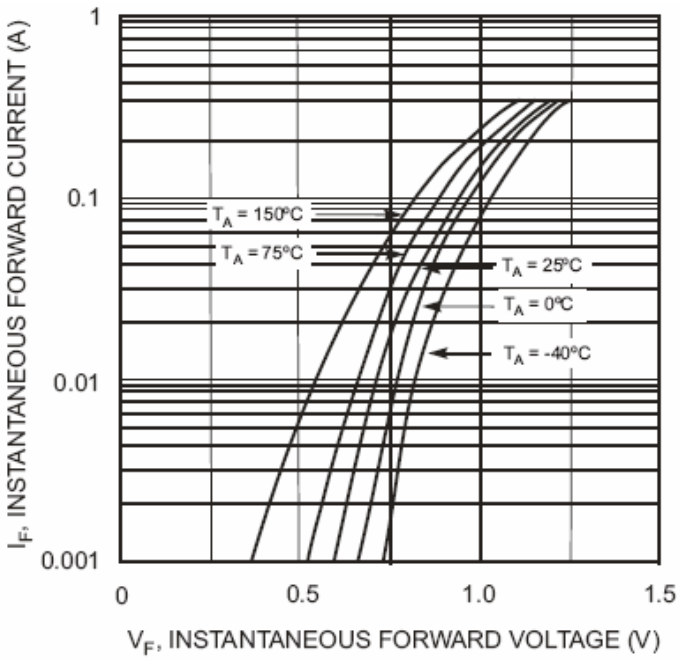


Fig. 2 Forward Characteristics

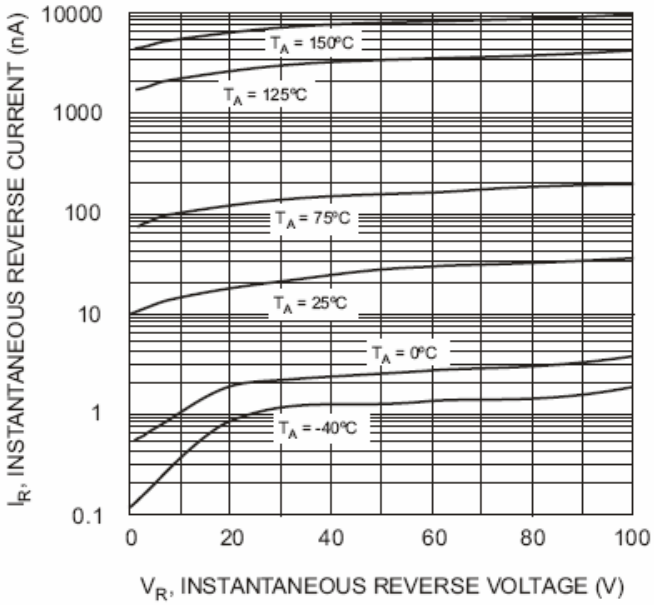


Fig. 3 Typical Reverse Characteristics

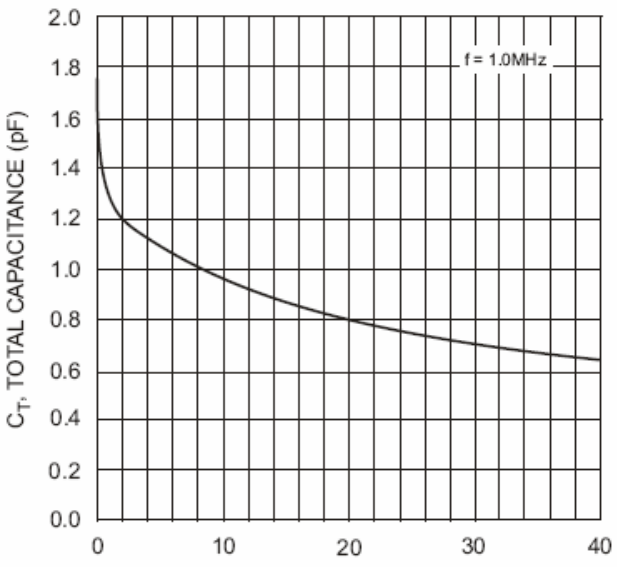


Fig. 4 Typical Capacitance vs. Reverse Voltage