

## Features

- Small Outline Surface Mount Package
- Low Cost
- Low Current Leakage
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

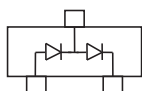
## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 625°C/W Junction to Ambient

MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage $V_{RRM}$	RMS Reverse Voltage $V_{R(RMS)}$	Working Peak Reverse Voltage $V_{RWM}$
BAV199WT	K52	85V	60V	85V

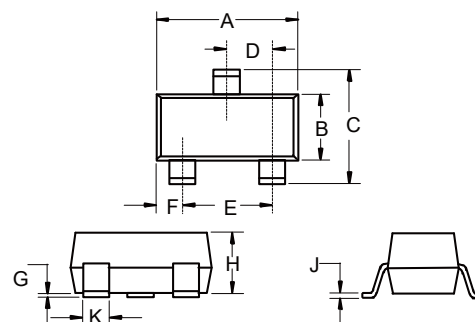
Forward Continuous Current	$I_F$	160mA	
Average Rectified Output Current	$I_o$	160mA	
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	4.0A 1.0A 0.5A	@1μs @1ms @1s
Power Dissipation	$P_{TOT}$	200mW	

## Internal Structure



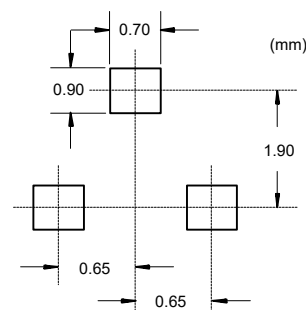
## Dual Series Switching Diode

### SOT-323



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.071	0.087	1.80	2.20	
B	0.045	0.053	1.15	1.35	
C	0.083	0.096	2.10	2.45	
D	0.026	Nominal	0.65	Nominal	
E	0.047	0.055	1.20	1.40	
F	0.012	0.016	0.30	0.40	
G	0.000	0.004	0.00	0.10	
H	0.035	0.044	0.90	1.10	
J	0.002	0.010	0.05	0.25	
K	0.006	0.016	0.15	0.40	

### Suggested Solder Pad Layout



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Minimum Reverse Breakdown Voltage	$V_{BR}$	85V	$I_R=100.0\mu A$
Maximum Forward Voltage	$V_F$	0.90V 1.00V 1.10V 1.250V	$I_{FM}=1.0mA$ $I_{FM}=10.0mA$ $I_{FM}=50.0mA$ $I_{FM}=150.0mA$
Maximum Leakage Current	$I_R$	5.0nA	$V_R=75V$
Typical Junction Capacitance	$C_J$	2.0pF	$V_R=0.0V, f=1.0MHz$
Maximum Reverse Recovery Time	$t_{rr}$	3.0 $\mu s$	

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

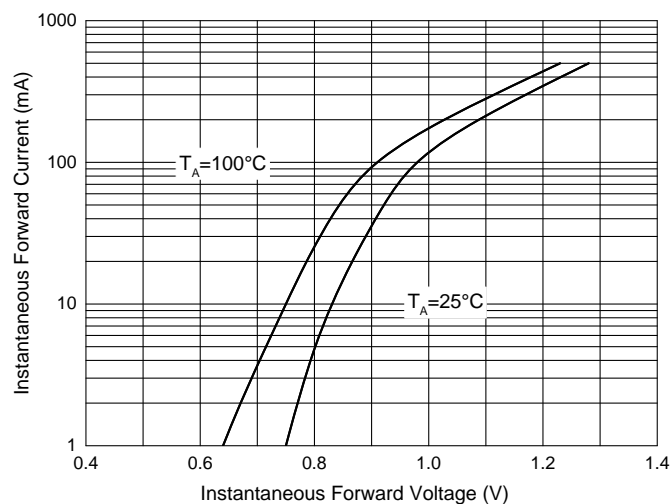


Fig. 2 - Typical Reverse Leakage Characteristics

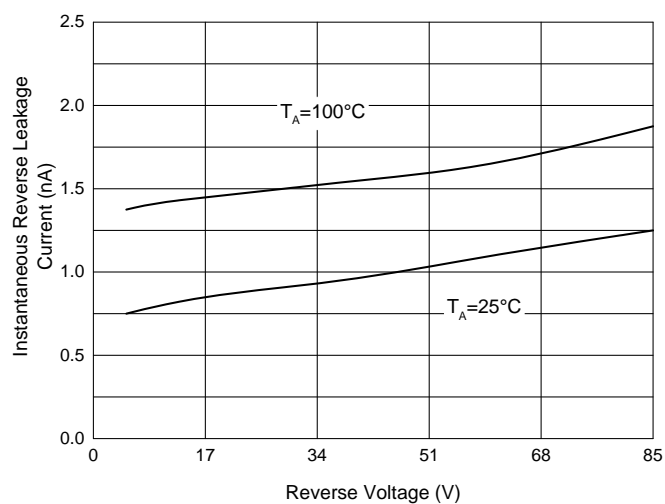
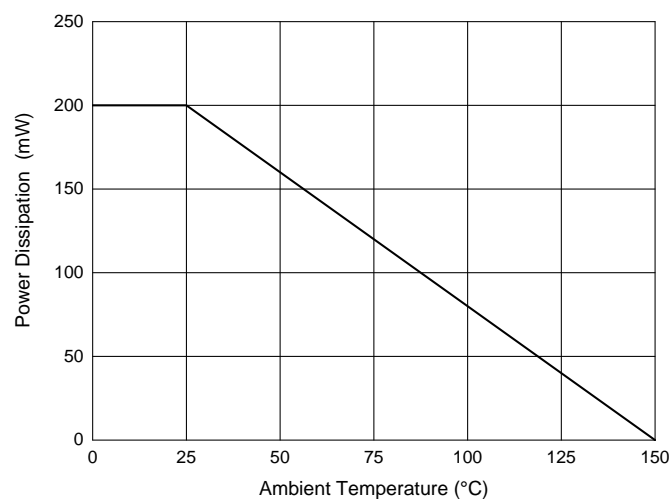


Fig. 3 - Power Derating Curve



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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