



## BAV199WT

### Dual Series Switching Diode

### Features

- Low Current Leakage
- Forward Current:  $I_F=160\text{mA}$
- Small Outline Surface Mount Package
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking: K52
- Lead Free Finish/Rohs Compliant ("P" Suffix designates RoHS Compliant. See ordering information)
- Halogen free available upon request by adding suffix "-HF"

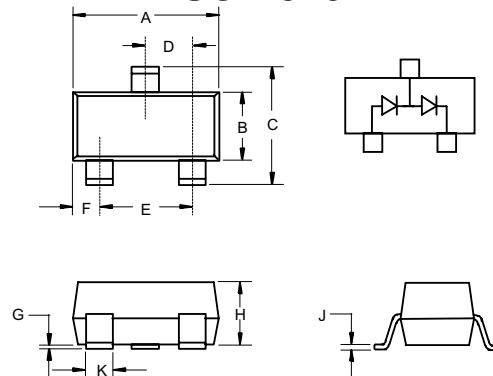
### Maximum Ratings @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value
Peak Repetitive Reverse Voltage	$V_{RRM}$	85V
Working Peak Reverse Voltage	$V_{RWM}$	85V
RMS Reverse Voltage	$V_{R(RMS)}$	60V
Average Rectified Output Current	$I_O$	160mA
Non-Repetitive Peak Forward Surge Current	$I_{FSM}$	4A @1us 1A @1ms 0.5A @1s
Power Dissipation	$P_{TOT}$	200mW
Thermal Resistance Junction to Ambient	$R_{thJA}$	625°C/W
Operating Temperature	$T_J$	-55°C to +150°C
Storage Temperature	$T_{stg}$	-55°C to +150°C

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

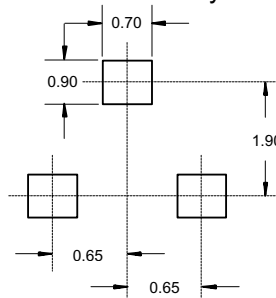
Symbol	Parameter	Min	Typ	Max	Unit
$V_{BR}$	Reverse Breakdown Voltage ( $I_R=100\mu\text{A}$ )	85	---	---	V
$V_F$	Forward Voltage $I_F=1.0\text{mA}$ $I_F=10\text{mA}$ $I_F=50\text{mA}$ $I_F=150\text{mA}$	---	---	0.90 1.00 1.10 1.25	V
$I_R$	Leakage Current ( $V_R=75\text{V}$ )	---	---	5.0	nA
$C_j$	Junction Capacitance ( $V_R=0$ , $f=1.0\text{MHz}$ )	---	2.0	---	pF
$t_{rr}$	Reverse recovery time	---	---	3.0	$\mu\text{s}$

### SOT-323

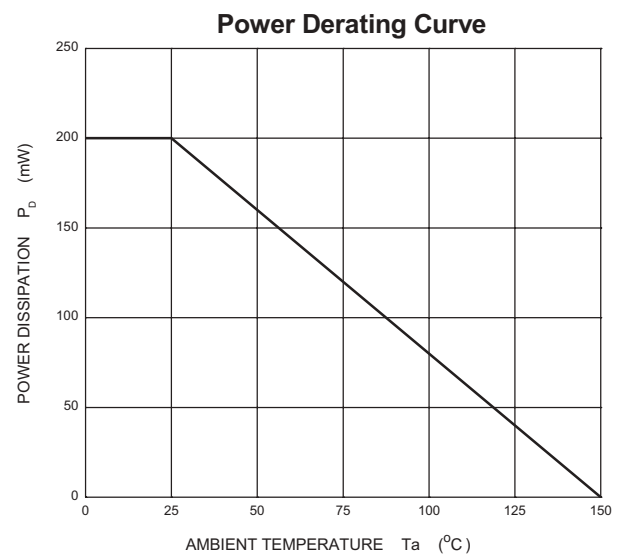
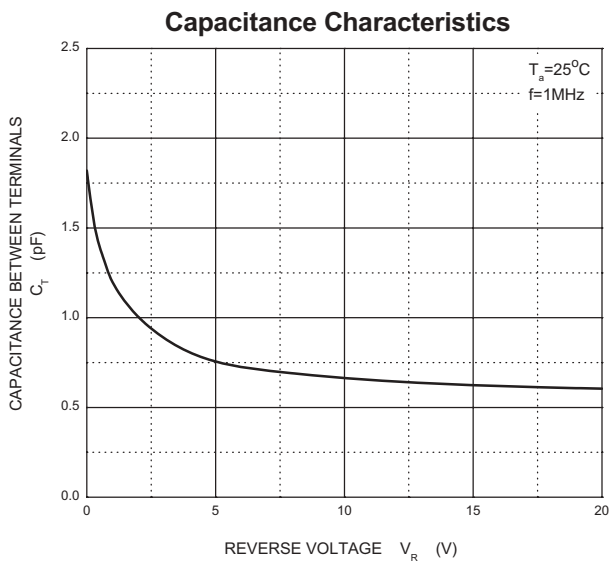
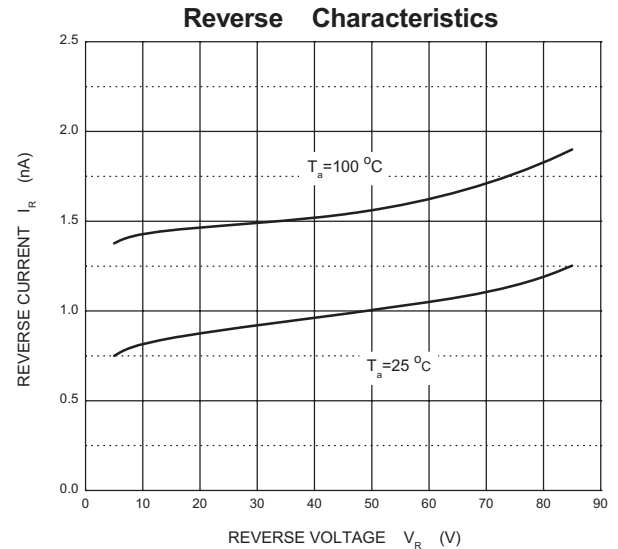
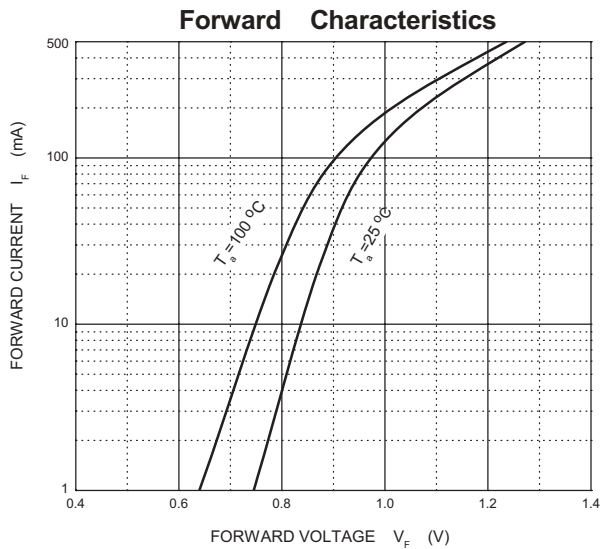


DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.087	1.80	2.20	
B	.045	.053	1.15	1.35	
C	.083	.096	2.10	2.45	
D	.026 Nominal		0.65 Nominal		
E	.047	.055	1.20	1.40	
F	.012	.016	.30	.40	
G	.000	.004	.000	.100	
H	.035	.039	.90	1.00	
J	.004	.010	.100	.250	
K	.006	.016	.15	.40	

### Suggested Solder Pad Layout



# Typical Characteristics



## 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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