



Micro Commercial Components

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# BAT54V

## Features

- Fast Switching Speed
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free Plating
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## 150mW Schottky Diodes

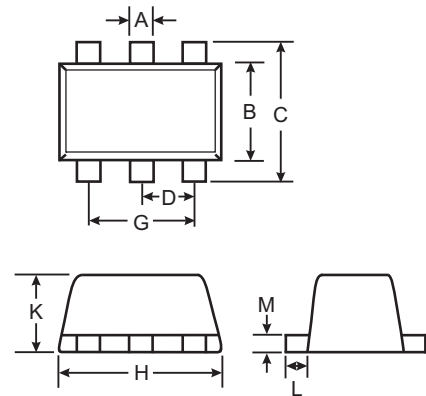
## Maximum Ratings

Symbol	Parameter	Rating	Unit
$V_{RRM}$	Peak Repetitive Reverse Voltage	30	V
$V_{RWM}$	Working Peak Reverse Voltage		
$V_R$	DC Blocking Voltage		
$I_O$	Average Rectified Output Current	200	mA
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	833	$^{\circ}C/W$
$P_D$	Power dissipation	150	mW
$T_J$	Junction Temperature	-65 to +150	$^{\circ}C$
$T_{STG}$	Storage Temperature	-65 to +150	$^{\circ}C$

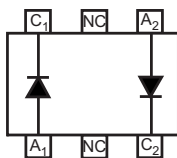
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions
$V_{(BR)}$	Reverse Breakdown Voltage	30V		$I_R=100 \mu A$
$I_R$	Reverse Voltage Leakage Current		2 $\mu A$	$V_R=25V$
$V_F$	Forward Voltage		240mV 320mV 400mV 500mV 1000mV	$I_F=0.1mA$ $I_F=1.0mA$ $I_F=10mA$ $I_F=30mA$ $I_F=100mA$
$C_T$	Total Capacitance		10pF	$V_R=1V, f=1MHz$
$t_{rr}$	Reverse Recovery Time		5ns	$I_{F1}=10mA, I_{R1}=10mA \sim 1mA, R_L=100 \Omega$

## SOT-563



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.006	.011	0.15	0.30	
B	.043	.049	1.10	1.25	
C	.061	.067	1.55	1.70	
D	.020		0.50		
G	.035	.043	0.90	1.10	
H	.059	.067	1.50	1.70	
K	.022	.023	0.56	0.60	
L	.004	.011	0.10	0.30	
M	.004	.007	0.10	0.18	



Marking: KAV

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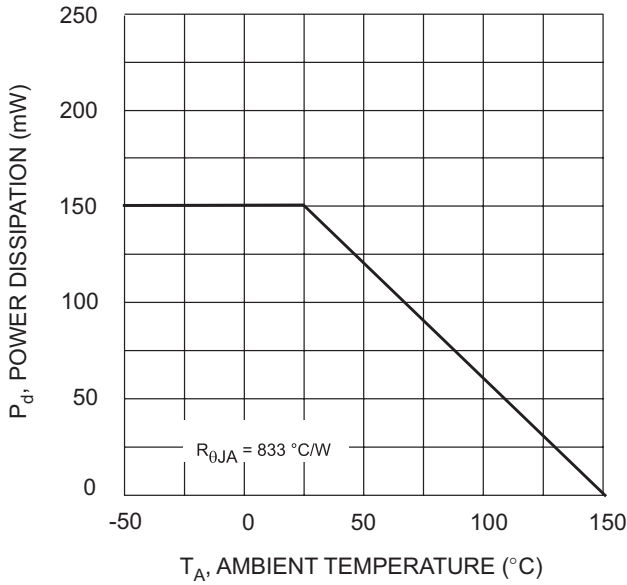


Fig. 1, Derating Curve - Total

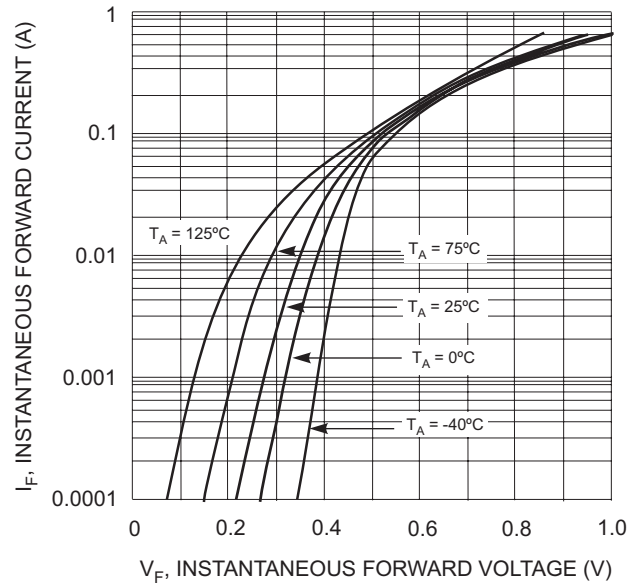


Fig. 2 Forward Characteristics

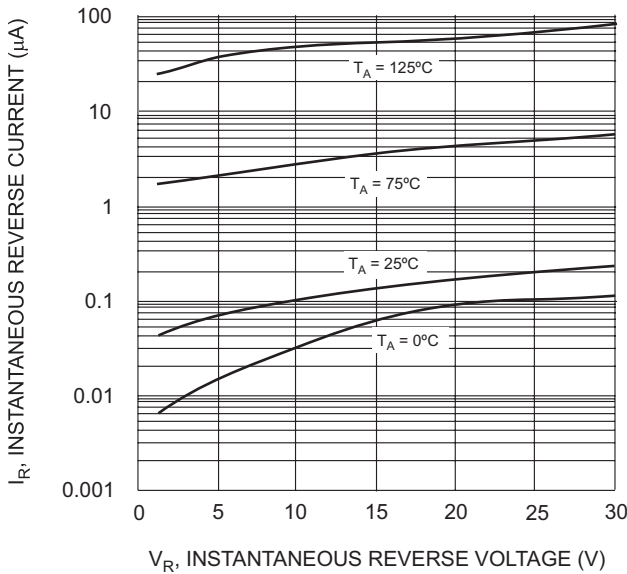


Fig. 3 Typical Reverse Characteristics

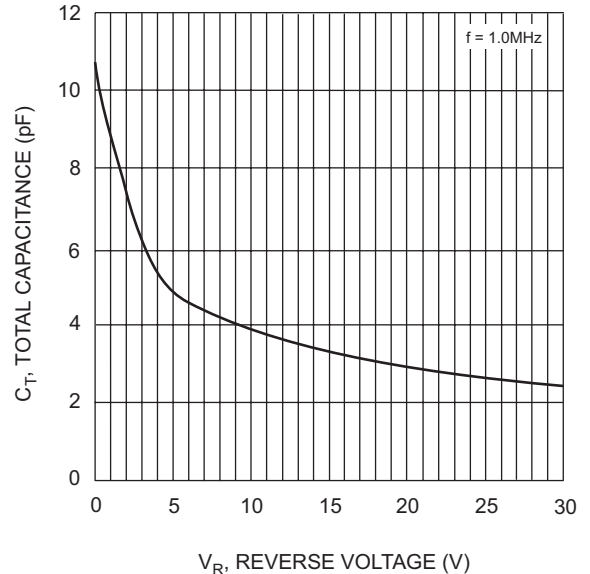


Fig. 4 Typical Capacitance vs. Reverse Voltage



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;3Kpcs/Reel

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