

**Features**

- Fast Switching Speed
- Low Forward Voltage Drop
- PN Junction Guard Ring for Transient and ESD Protection
- Lead Free Plating
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 667°C/W Junction to Ambient

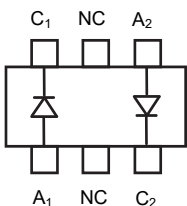
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
BAS40V	KAN	40V	40V

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

Minimum Reverse Breakdown Voltage	$V_{(BR)}$	40V	$I_R = 10\mu A$
Average Forward Current	$I_F$	200mA	
Power Dissipation	$P_d$	150mW	
Maximum Forward Voltage	$V_F$	380mV 1000mV	$I_F=1.0mA, t_p<300\mu s$ $I_F=40mA, t_p<300\mu s$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	0.2 $\mu A$	$V_R = 30V, t_p<300\mu s$
Maximum Total Capacitance	$C_T$	5.0pF	Measured at 1.0MHz, $V_R=0.0V$
Maximum Reverse Recovery Time	$t_{rr}$	5nS	$I_F=I_R=10mA, I_{rr}=1mA, R_L=100\Omega$

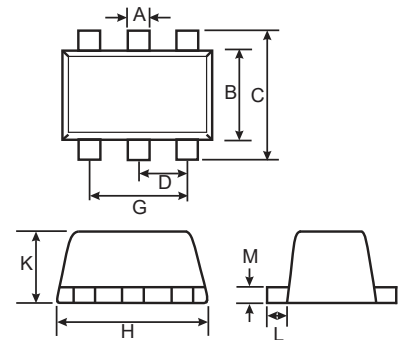
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

**Internal Structure:**



**150mW, 40Volt  
Schottky Barrier  
Diode**

**SOT-563**



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.006	0.011	0.15	0.30	
B	0.043	0.051	1.10	1.30	
C	0.059	0.067	1.50	1.70	
D	0.020		0.50		TYP.
G	0.035	0.043	0.90	1.10	
H	0.059	0.067	1.50	1.70	
K	0.022	0.026	0.55	0.65	
L	0.004	0.011	0.10	0.30	
M	0.004	0.007	0.10	0.18	

## Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

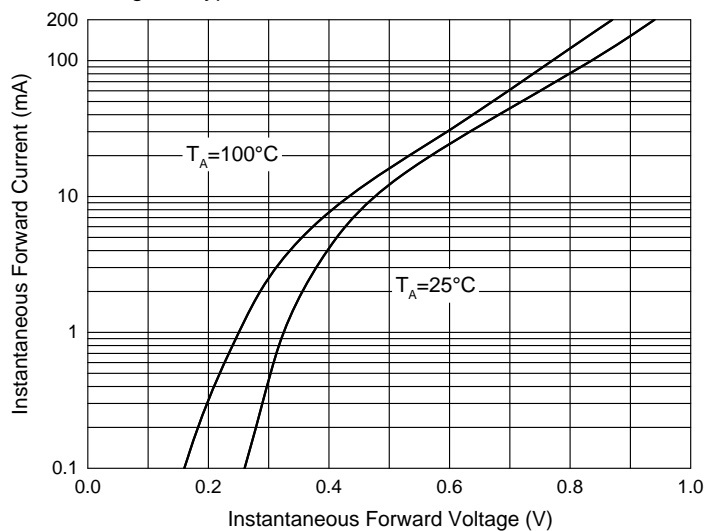


Fig. 2 - Typical Reverse Leakage Characteristics

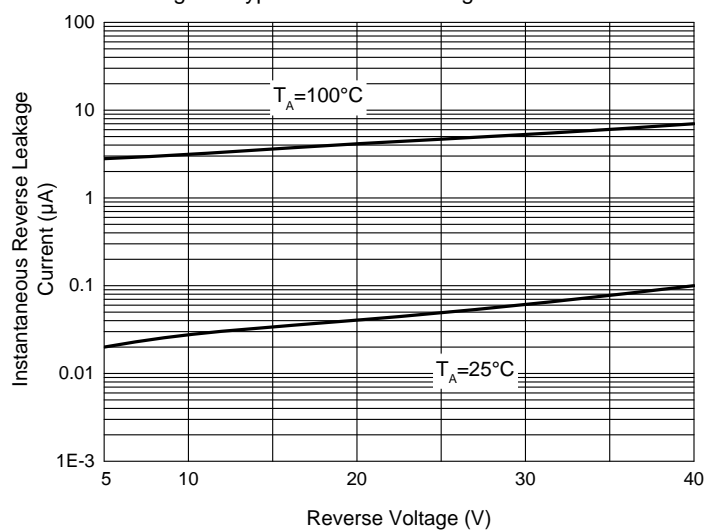
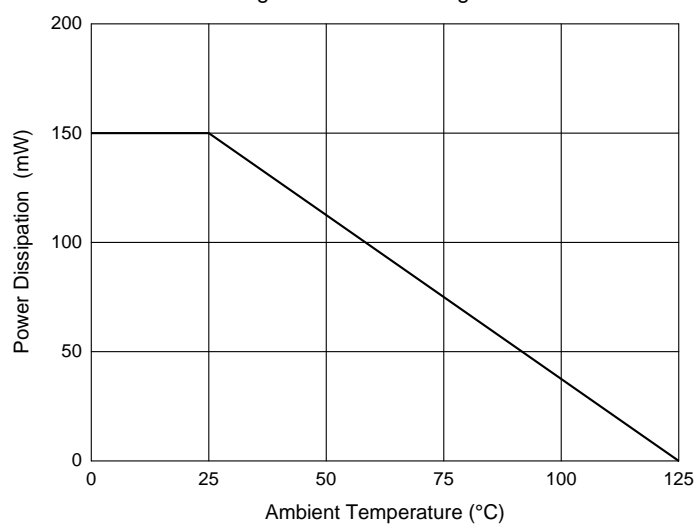


Fig. 3 - Power Derating Curve



## Ordering Information

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

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