

Features

- · AEC-Q101 Qualified
- Halogen Free. "Green" Device (Note 1)
- · 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
BAS19WTHE3	KA8
BAS20WTHE3	KT2
BAS21WTHE3	KT3

Forward Continuous Current	I _F	200mA	
Power Dissipation	Pd	200mW	T _A =25°C

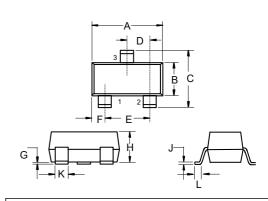
Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure:



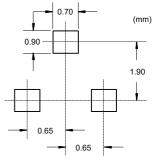
200mW Switching Diode





DIMENSIONS						
DIM	INC	HES MM		М	NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.071	0.087	1.80	2.20		
В	0.045	0.053	1.15	1.35		
С	0.083	0.096	2.10	2.45		
D	0.0)26	0.	65	TYP.	
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		
Н	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		
L	0.010	0.018	0.26	0.46		

Suggested Solder Pad Layout





Electrical Characteristics @ 25°C Unless Otherwise Specified

Reverse Breakdown Voltage BAS19WTHE3 BAS20WTHE3 BAS21WTHE3	- K	100V 150V 200V	I _R =100.0μA
Maximum Forward Voltage	V _F	1.000V 1.250V	I _{FM} =100.0mA I _{FM} =200.0mA
Maximum DC Reverse Current At Rated DC Blocking Voltage BAS19WTHE3 BAS20WTHE3 BAS21WTHE3	I _R	0.1μΑ	V _R =100V V _R =150V V _R =200V
Diode Capacitance	C _d	5.0pF	V _R =0.0V,f=1.0MHz
Reverse Recovery Time	t _{rr}	50.0ns	I _F =30mA, I _R =30mA I _{rr} =0.1*I _R

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Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

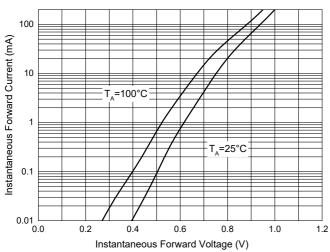


Fig. 2 - Typical Reverse Leakage Characteristics

Tolor T_A=100°C

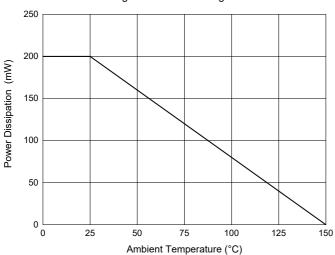
T_A=100°C

T_A=25°C

T_A=25°C

Reverse Voltage (V)

Fig. 3 - Power Derating Curve





Ordering Information

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

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