K32 Thru K320

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SuperSchottky – 3A, 20~200V Schottky Barrier Rectifiers

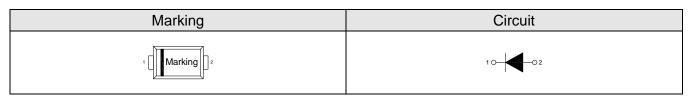
1. Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Built-in strain relief, ideal for automated placement
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 260°C/10 seconds at terminals

2. Mechanical Data

- Case: Molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbol marking on body
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams

3. Marking and Circuit



4. Specification

Absolute Maximum Rating & Electrical Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load.

Parameters		Symbol	K32	K34	K36	K38	K310	K315	K320	Unit
Maximum repetitive peak reverse voltage		VRRM	20	40	60	80	100	150	200	V
Maximum RMS voltage		V _{RMS}	14	28	42	56	70	105	140	V
Maximum DC blocking voltage		V _{DC}	20	40	60	80	100	150	200	V
Average Rectified Output Current at TL=100 $^\circ\!\mathrm{C}$		I _{F(AV)}	3.0						А	
Non-Repetitive Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	70					A		
Maximum instantaneous forward voltage at 3.0A		VF	0.55 0.70 0.85 0.95			95	V			
Maximum DC reverse current at rated	T_=25 ℃		0.5			0.05				mA
DC blocking voltage	Tj=125 ℃	- I _R	50			10				
Typical thermal resistance		Roja	85						°C/W	
Operating junction temperature range		TJ	-	-55 TO +125 -55 TO +150				°C		
Storage temperature range		T _{STG}	-55 TO +150						°C	

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5. Typical Characteristic

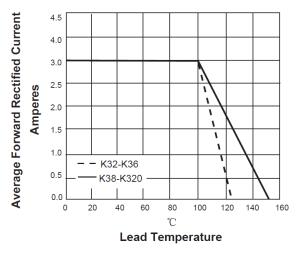
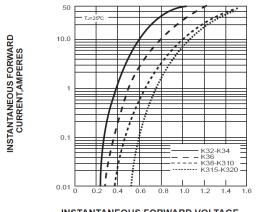


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

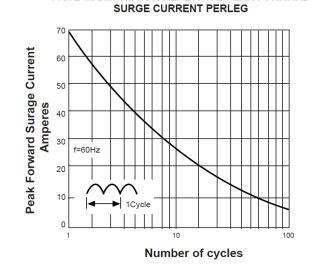
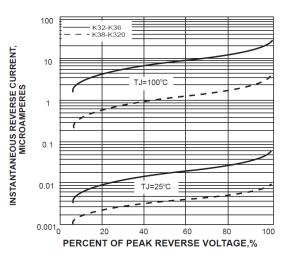


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD

FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

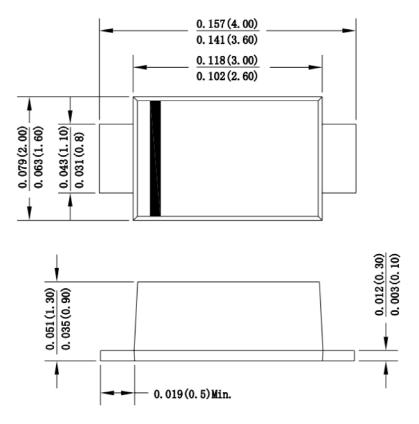




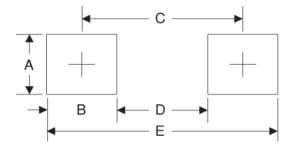
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6. Dimension (SOD123FL)



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)		
А	1.20	0.048		
В	1.15	0.045		
С	3.10	0.122		
D	1.95	0.077		
E	4.25	0.167		

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