

SILICON BRIDGE RECTIFIER

FEATURES

- Low forward voltage drop
- •High current capability
- •High surge current capability
- •High reliability
- \bullet High temperature soldering guaranteed:260 $^\circ\! \mathbb{C}/10$ seconds at terminals
- •Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case style: DO-27 plastic molded
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase.half wave.60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

	Symbols	BY 251	BY 252	BY 253	BY 254	BY 255	BY 20 00	Units
Maximum Recurrent Peak Reverse Voltage	Vrrm	200	400	600	800	1300	2000	Volts
Maximum RMS Voltage	VRMS	140	280	420	560	910	0	Volts
Maximum DC Blocking Voltage	VDC	200	400	600	800	1300	2000	Volts
Maximum average Forward Rectified Current 0.5"(12.5mm)lead length at T _A =75°C	l(AV)	3.0						Amps
Peak Forward Surge Current (8.3ms half sine- wave superimposed on rated load (JEDEC method)	IFSM	150.0						Amps
Maximum Instantaneous Forward Voltage at 3.0 A	VF	1.0						Volts
Maximum Reverse $T_{A} = 25 ^{\circ}C$		5.0						μA
Voltage $T_{A} = 100 ^{\circ}{\rm C}$		100.0						
Maximum Full=Load=Reverse=CurrentIFull Cycle=Average=K375?E9K5mmFLead=Length @TaZ75°C	IR	30						μA
Typical Junction Capacitance (Note 1)	CJ 40.0				РF			
Typical Thermal Resistance (Note 2)	R₀ ja	40.0				°C/W		
Operating and Storage temperature Range	Тј Tstg	-65 to+150					D,	

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance from Junction to Ambient. 375"(9.5mm) lead length.

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VOLTAGE RANGE: 200 --- 2000 V CURRENT: 3.0 A





RATINGS AND CHARACTERISTIC CURVES



FIG.3 - MAXIMUM PEAK NON-REPETITIVE FORWARD SURGE CURRENT







FIG.2-TYPCAL INSTANTANEOUS FORWARD CHARACTERISTICS



FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE %