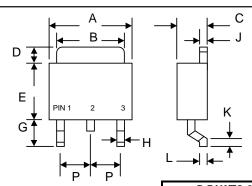


# **SD320YS - SD3100YS**

# 3.0A DPAK SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

## **Features**

- Schottky Barrier chip
- Guard Ring Die Construction
- Low Profile Package
- High Surge Current Capability
- Low Power Loss, High Efficiency
- Ideal for Printed Circuit Board
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling Applications



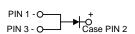
## **Mechanical Data**

Case: Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026

Polarity: Cathode Band
Weight: 0.4 grams (approx.)
Mounting Position: Any
Marking: Type Number

Standard Packaging: 16mm Tape (EIA-481)



D PAK/TO-252AA						
Dim	Min	Max				
Α	6.4	6.8				
В	5.0	5.4				
С	2.35	2.75				
D		1.60				
E	5.3	5.7				
G	2.3	2.7				
Н	0.4	0.8				
J	0.4	0.6				
K	0.3 0.7					
L	0.50 Typical					
Р	_	2.3				
All Dimensions in mm						

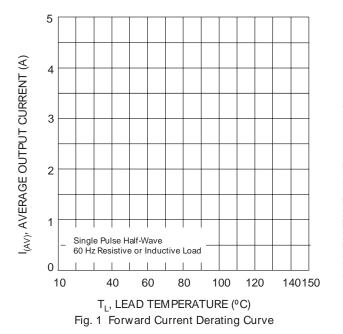
# Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

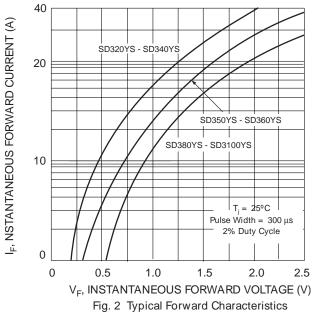
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

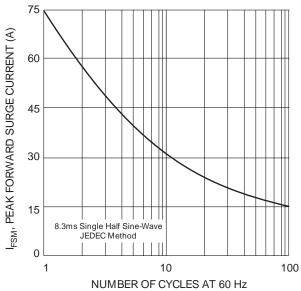
Characteristic	Symbol	SD 320YS	SD 330YS	SD 340YS	SD 350YS	SD 360YS	SD 380YS	SD 3100YS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	70	٧
Average Rectified Output Current @T <sub>L</sub> =	75°C Io	3.0						Α	
Non-Repetitive Peak Forward Surge Current 8 Single half sine-wave superimposed on rated ( (JEDEC Method)		75					А		
Forward Voltage (Note 1) $@I_F = 3.$	OA VFM	0.5 0.64 0.85			85	V			
	I IRM	0.2 20					mA		
Typical Junction Capacitance (Note 2)	Cj	250						pF	
Typical Thermal Resistance Junction to Ambie	nt R <sub>θ</sub> JA	80					K/W		
Operating Temperature Range	Tj	-50 to +125					°C		
Storage Temperature Range	Tstg	-50 to +150					°C		

Note: 1. Mounted on P.C. Board with 14mm<sup>2</sup> (0.13mm thick) copper pad.

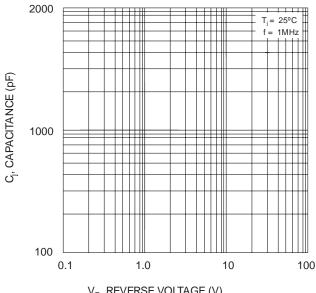
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.











 $V_R$ , REVERSE VOLTAGE (V) Fig. 4 Typical Junction Capacitance

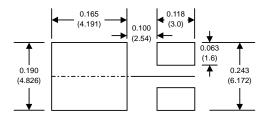
## ORDERING INFORMATION

Product No.◆	Package Type	Shipping Quantity				
SD320YS-T3	DPAK	2500/Tape & Reel				
SD330YS-T3	DPAK	2500/Tape & Reel				
SD340YS-T3	DPAK	2500/Tape & Reel				
SD350YS-T3	DPAK	2500/Tape & Reel				
SD360YS-T3	DPAK	2500/Tape & Reel				
SD380YS-T3	DPAK	2500/Tape & Reel				
SD3100YS-T3	DPAK	2500/Tape & Reel				

T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

## RECOMMENDED FOOTPRINT



inches(mm)

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.