

# WP61065AB

## High Property Device for Surge & Overvoltage noise Protection

This device has been especially designed to protect 1 low voltage or signal line, as well as classical RS-485 interface, against transient over-voltages.

ESD-voltages are clamped by 2 TVS diodes. Surges are suppressed by 2 thyristors, their breakdown voltage close to 8V, then their leakage current as low as 1uA.

This devices are not subject to ageing and provide a fail safe mode in short circuit for a better protection. WPG are used to help equipment to meet various standards such as UL1950, IEC950 / CSA C22.2, UL1459 and FCC part68.

### Features

- Integrated the two TVS diodes and two thyristor
- Accurate voltage of protection
- Low switching voltages:  $V_{BR}$
- Low leakage current:  $I_R = 2 \text{ uA max}$
- High Peak pulse current
- Solid-state silicon technology
- Meets MSL 1 Requirements
- ROHS compliant
- WeiPan technology



SMA-J

### Main applications

- Signal Line
- RS-485 interface
- Telecommunications infrastructure
- PBX's and other switches
- Set-top box
- Ammeter

### Ordering Information

Device	Marking	Qty per Reel	Reel Size
WP61065AB	P065B	5000	13 Inch

**Maximum ratings (Tamb=25°C Unless Otherwise Specified)**

Parameter	Symbol	Value	Unit
Non-repetitive peak on-state current: WP61065AB 10/1000 us (Telcordia(Bellcore)Gr-1089-CORE.Issue 2.February 1999,Section4) 5/320 us (ITU-T K.20, K.21& K.45, K.44 open-circuit voltage wave shape 10/700us) 1.2/50 us (Telcordia(Bellcore)Gr-1089-CORE.Issue 2.February 1999,Section4)	I <sub>PPSM</sub>	70 100 250	A
Lead Soldering Temperature	T <sub>L</sub>	260 (10 sec.)	°C
Operating Temperature Range	T <sub>J</sub>	-40 ~ 85	°C
Storage Temperature Range	T <sub>STG</sub>	-55 ~ 150	°C
Lead Solder Temperature – Maximum (10 Second Duration)	T <sub>L</sub>	260	°C
Junction To ambient	R <sup>θ</sup> JA	100	°C/W

Maximum ratings are those values beyond which device damage can occur. Maximum ratings applied to the device are individual stress limit values (not normal operating conditions) and are not valid simultaneously. If these limits are exceeded, device functional operation is not implied, damage may occur and reliability may be affected.

**Electrical characteristics ( Tamb=25°C Unless Otherwise Specified)**

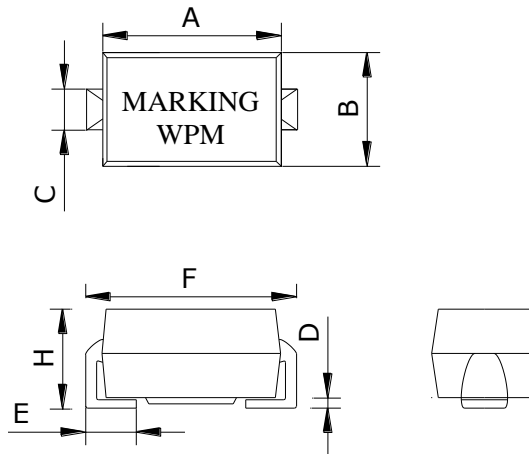
Parameter	Symbol	Value			Unit
		Min.	Typ.	Max.	
Repetitive peak off-state voltage, WP61065AB	V <sub>DRM</sub>			±6.5	V
Leakage Current, V <sub>R</sub> =6.5V WP61065AB	I <sub>R</sub>			±2	uA
Breakdown Voltage, I <sub>R</sub> =1mA WP61065AB	V <sub>DC</sub>		±8.3		V
Impulse breakover voltage, dv/dt ≤ ±100 V/μs, Linear voltage ramp, WP61065AB	V <sub>BO</sub>			±25	V
On-state voltage(Clamp Voltage), T = ±2.2 A, t w = 100 μs WP61065AB	V <sub>C</sub>			±4	V
Off-state capacitance, f =1 MHz, V <sub>d</sub> =0.3V rms, V <sub>DC</sub> =2V WP61065AB	C <sub>off</sub>			80	pF

**Package Information**

**SMA-J**

**Mechanical Data**

- Case: SMA-J
- Case Material: Molded Plastic. UL Flammability
- Classification Rating 94V-0
- Polarity Indicator: Cathode Band (Note: Bi-directional devices have no polarity indicator.)
- Weight: 0.069grams (approximate)



**SMA-J**

DIM	Millimeters	
	Min	Max
A	3.39	4.60
B	2.40	2.79
C	1.25	1.65
D	0.150	0.310
E	0.76	1.52
F	4.80	5.28
H	1.90	2.29

## **Contact Information**

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