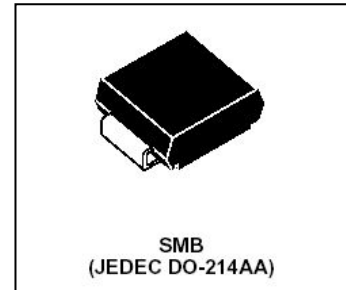


WES806SUC

Ultra-low Capacitance Thyristor Surge Protector

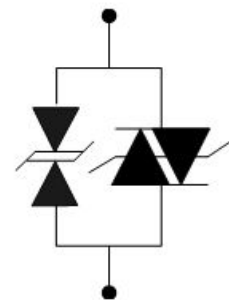
Features

- Integrated Bi-directional TVS for ESD protection
- Integrated Bi-directional thyristor for Surge Protection
- Ultra-low capacitance
- High surge capability
- High off-state impedance
- Low leakage current
- Short-circuit failure mode



Main Application

- Data lines and security systems.
- CATV line amplifiers and power inserters.
- Sprinkler systems.



Absolute Maximum Ratings (TA =25° C)

Parameter	Symbol	Value	Unit
Non-repetitive peak impulse current (4) 10/1000 μ s (Telcordia GR-1089-CORE)	I_{PPSM}	75	A
Non-repetitive peak impulse Voltage 10/700 μ s (ITU-T K.20, K.21 & K.45, K.44)	V_{PPSM}	4000	V
ESD peak pulse Voltage (contact discharge)	V_{ESD}	± 30	KV

Electrical Parameters (T=25°C)

Part Number	V_{DRM}	I_{DRM}	V_{BR}	V_{BO}	I_{BO}	V_T	I_T	I_H	C_O
	Max.	Max.	Typ.	Typ.	Max.	Max.	Max.	Typ.	Typ.
	V	μ A	V	V	mA	V	A	mA	pF
WES806SUC	6	5	17	25	800	4	2.2	30	9

V_{DRM} : Stand-off voltage, is measured at I_{DRM} .

I_{DRM} : Leakage current at V_{DRM} .

V_{BO} : Breakover voltage, is measured at 100V/ μ s.

I_{BO} : Breakover current.

V_T : On-state voltage.

I_T : On-state current.

C_O : Off-state capacitance.

I_H : Holding current.

V_{BR} : Breakdown voltage, is measured at 1mA ,

I_{PP} : Peak pulse current, is a repetitive surge rating and for internal bidirectional TVS Diode and is guaranteed for the life of the product.

General Notes:

- All measurements are made at an ambient temperature of 25 °C. I_{PP} applies to -40 °C through +85 °C temperature range.
- Listed WES devices are bi-directional. All electrical parameters and surge ratings apply to forward and reverse polarities.
- Special voltage (V_{BO} and V_{DRM}) and holding current (I_H) requirements are available up on request.
- Off-state capacitance is measured at 1 MHz with a 2 V bias.

Thermal Resistances

Symbol	Parameter	Value	Unit
T _s	Storage temperature range	-55 to +150	°C
T _j	Maximum junction temperature	150	°C

Electrical Characteristics Curves

ESD Clamping characteristic

Application Information

ESD and lightning surge protection for Analog Video Line

Product Dimensions

Ref. (mm)	Min.	Max.
A1	1.90	2.45
A2	0.05	0.20
b	1.95	2.20
c	0.15	0.41
E	5.10	5.60
E1	4.05	4.60
D	3.30	3.95
L	0.75	1.60

Part Numbering System**Marking:****Package Information**

Package Type	Description	Quantity (pcs)	Standard
SMB	Tape & Reel Pack	2500	EIA-481-D

Contact Information**CYG WAYON CIRCUIT PROTECTION CO., LTD.**

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For additional information, please contact your local Sales Representative.

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