

ES1AWG SERIES

SURFACE MOUNT SUPERFAST RECTIFIER

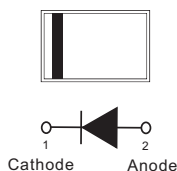
VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Ampere

FEATURES

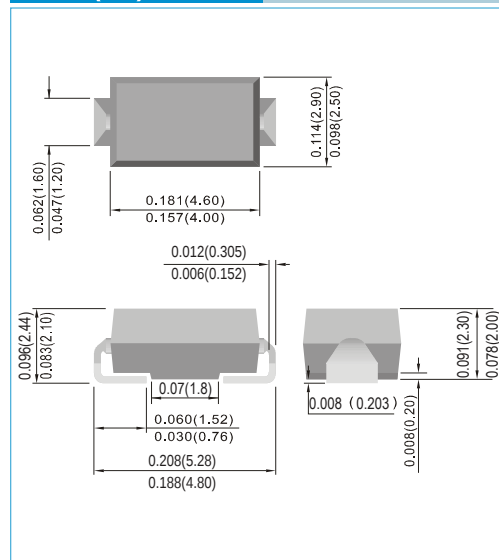
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Lead free in comply with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0023 ounce, 0.0679 gram



SMA(W) Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	ES1AWG	ES1BWG	ES1CWG	ES1DWG	ES1EWG	ES1GWG	ES1JWG	ES1KWG	ES1MWG	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	600	800	1000	V
Maximum Average Forward Current	I _{F(AV)}	1									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30									A
Maximum Forward Voltage at 1A	V _F	0.95				1.25		1.7			V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	1									μA
Typical Junction Capacitance	C _J	18									pF
Typical Thermal Resistance (Note 1) (Note 2)	R _{θJA} R _{θJL}	150 22									°C / W
Maximum Reverse Recovery Time (Note 3)	t _{rr}	35							75	100	ns
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150									°C

NOTES:

1. Mounted on an FR4 PCB, single-sided copper, mini pad.
2. Mounted on an FR4 PCB, single-sided copper, with 76.2 x 114.3mm copper pad area.
3. Reverse Recovery Tset Conditions: $I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$.

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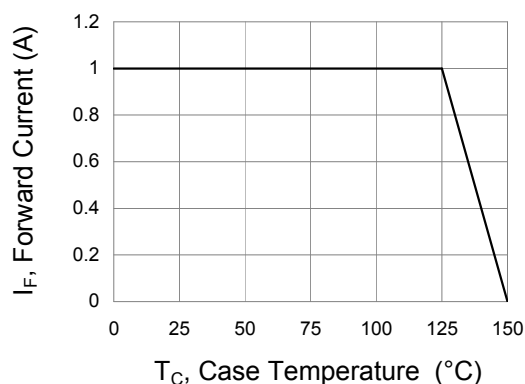


Fig.1 Forward Current Derating Curve

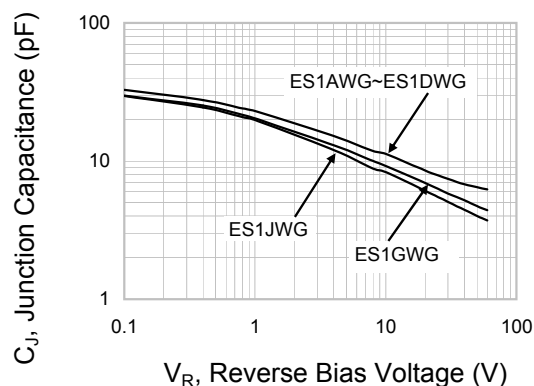


Fig.2 Typical Junction Capacitance

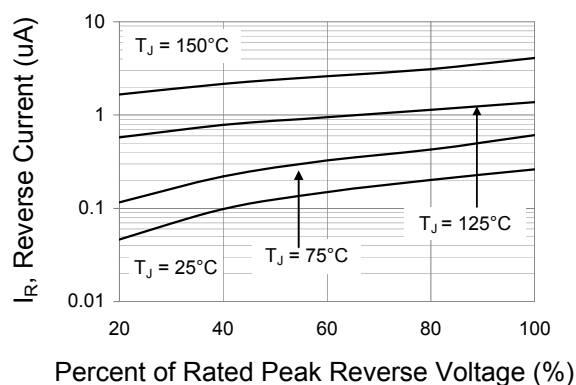


Fig.3 Typical Reverse Characteristics

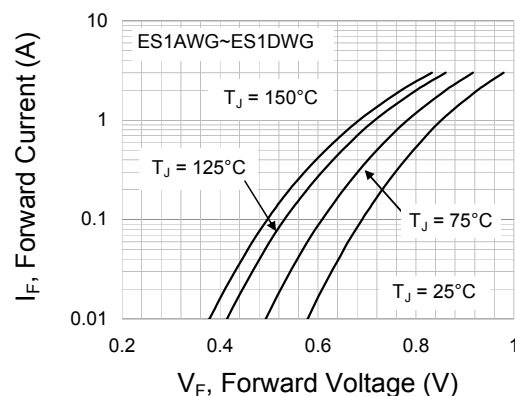


Fig.4 Typical Forward Characteristics

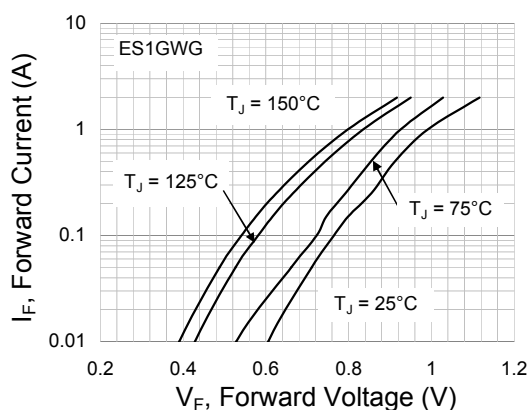


Fig.5 Typical Forward Characteristics

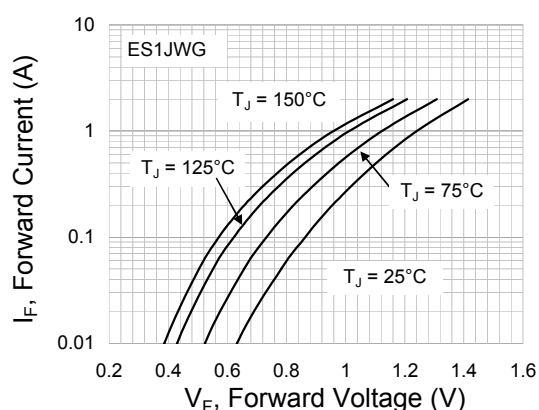


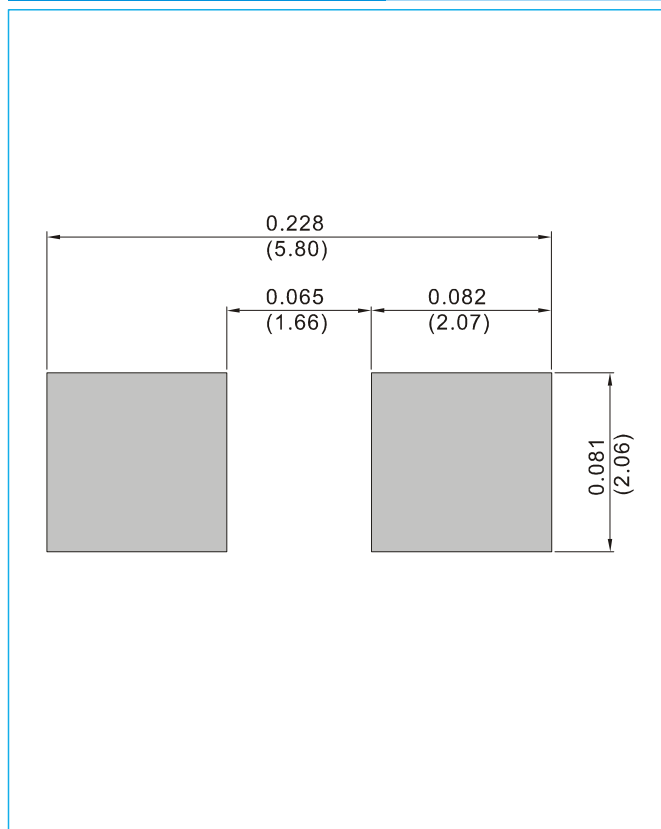
Fig.6 Typical Forward Characteristics

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MOUNTING PAD LAYOUT

SMA(W)

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8K per 7" plastic Reel

ES1AWG SERIES

Part No_packing code_Version

ES1AWG_R1_00001

ES1AWG_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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