

Surface Mount Superfast Recovery Rectifier

Reverse Voltage – 50 to 600 V

Forward Current – 1 A

FEATURES

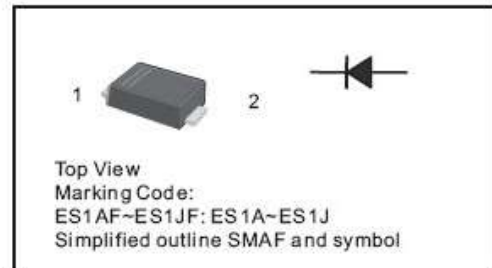
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Superfast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- pprox. Weight: 27mg 0.00086oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings and 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	Symbols	ES1AF	ES1BF	ES1CF	ES1DF	ES1EF	ES1GF	ES1JF	Units	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	600	V	
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V	
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	600	V	
Maximum Average Forward Rectified Current at $T_L = 100\text{ }^\circ\text{C}$	$I_{F(AV)}$	1							A	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25							A	
Maximum Forward Voltage at 1 A	V_F	1			1.25		1.7		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_a = 25\text{ }^\circ\text{C}$ $T_a = 125\text{ }^\circ\text{C}$	I_R	5					100			μA
Typical Junction Capacitance at $V_R = 4\text{V}$, $f = 1\text{MHz}$	C_j	10							pF	
Maximum Reverse Recovery Time at $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25\text{A}$	t_{rr}	35							ns	
Operating and Storage Temperature Range	T_J , T_{stg}	-55 ~ +150							$^\circ\text{C}$	

SHIKE MAKE CONSCIOUS PRODUCT

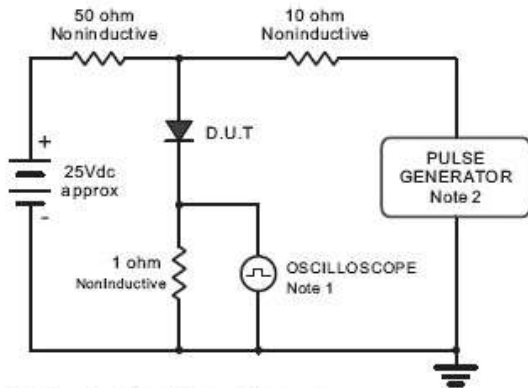
CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

REV.07

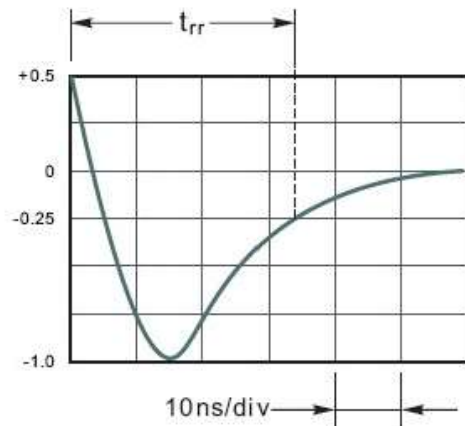


www.shike.tw

Fig.1 Reverse Recovery Time Characteristic And Test Circuit Diagram



Note: 1. Rise Time = 7ns, max.
Input Impedance = 1megohm, 22pF.
2. Rises Time = 10ns, max.
Source Impedance = 50 ohms.



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

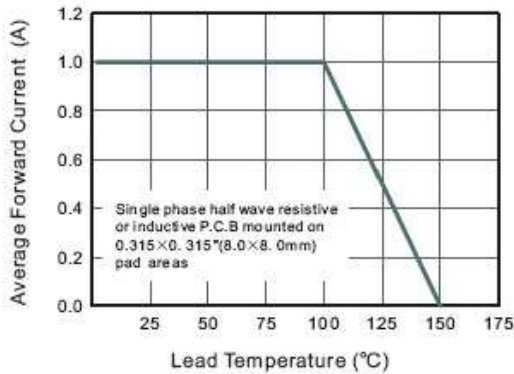


Fig.4 Typical Forward Characteristics

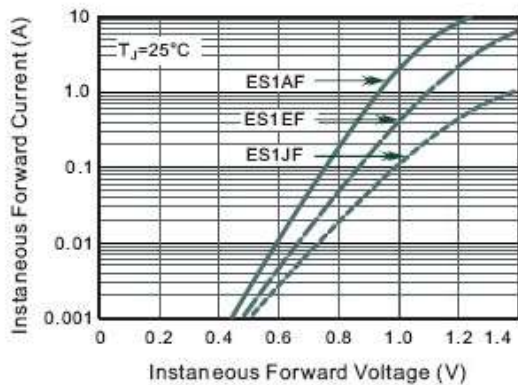


Fig.3 Typical Reverse Characteristics

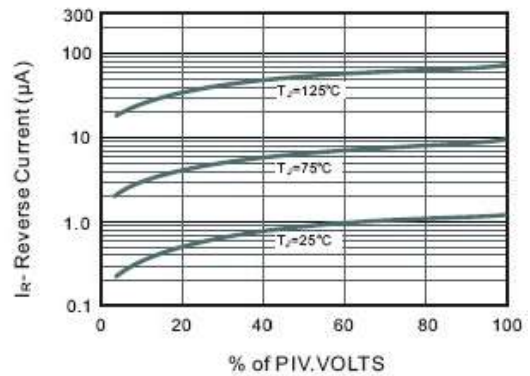
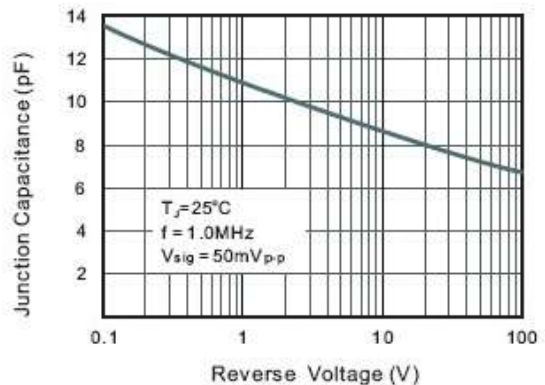


Fig.5 Typical Junction Capacitance



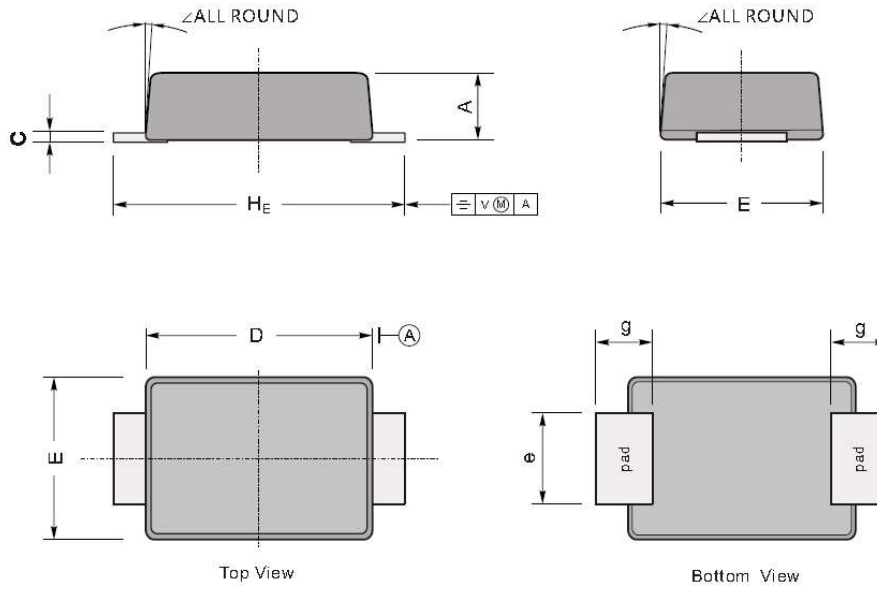
SHIKE MAKE CONSCIOUS PRODUCT
CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE



PACKAGE OUTLINE

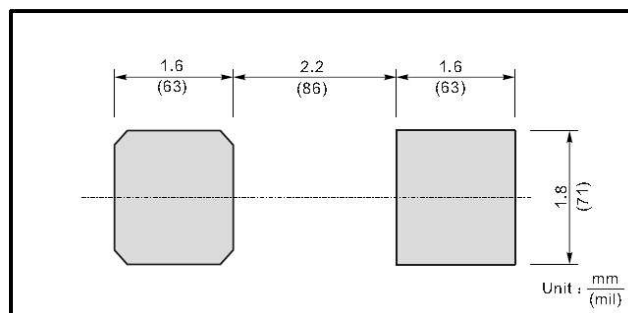
Plastic surface mounted package; 2 leads

SMAF



UNIT		A	C	D	E	e	g	H _E	∠
mm	max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

The recommended mounting pad size



SHIKE MAKE CONSCIOUS PRODUCT

CONSCIOUS PRODUCTS BEGIN WITH CONSCIOUS PEOPLE

REV.07



www.shike.tw

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Rectifiers](#) category:

Click to view products by [Shikues](#) manufacturer:

Other Similar products are found below :

[70HFR40](#) [FR105 R0](#) [RL252-TP](#) [DLA11C-TR-E](#) [DSA17G](#) [150KR30A](#) [1N5397](#) [1N4002G](#) [1N4005-TR](#) [UFS120Je3/TR13](#) [JANS1N6640US](#)
[481235F](#) [RRE02VS6SGTR](#) [067907F](#) [MS306](#) [70HF40](#) [T110HF60](#) [T85HFL60S02](#) [US2JFL-TP](#) [A1N5404G-G](#) [CRS04\(T5L,TEMQ\)](#)
[CRS12\(T5L,TEMQ\)](#) [ACGRB207-HF](#) [CLH07\(TE16L,Q\)](#) [CLH03\(TE16L,Q\)](#) [ACGRC307-HF](#) [ACEFC304-HF](#) [NTE6356](#) [NTE6359](#) [85HFR60](#)
[40HFR60](#) [70HF120](#) [85HFR80](#) [D126A45C](#) [SCF7500](#) [D251N08B](#) [SCHJ22.5K](#) [SM100](#) [SCPA2](#) [SDHD5K](#) [VS-12FL100S10](#) [ACGRA4001-](#)
[HF](#) [ACURA107-HF](#) [D1821SH45T PR](#) [D1251S45T](#) [NTE6358](#) [NTE5850](#) [NTE5819](#) [NTE5837](#) [NTE5892](#)