



## Surface Mount Super Fast Recovery Rectifier

Voltage

50~400 V

Current

2 A

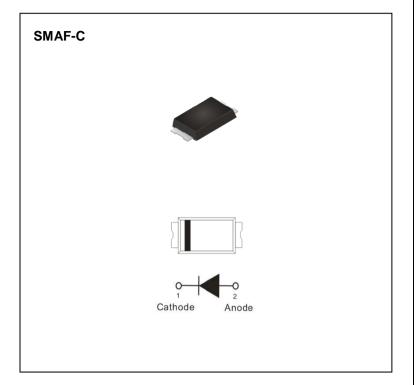
#### **Features**

- For surface mounted applications in order to optimize board space
- High temperature metallurgically bonded-no compression contacts as found in other diode-constructed rectifiers
- Glass passivated junction
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification94V-O
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

### **Mechanical Data**

• Case : Molded plastic, SMAF-C

Terminals : Solderable per MIL-STD-750, Method 2026
Approx. Weight : 0.0012 ounces, 0.034 grams



### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

PARAMETER	SYMBOL	ERT2AAFC	ERT2BAFC	ERT2CAFC	ERT2DAFC	ERT2EAFC	ERT2GAFC	UNITS
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	150	200	300	400	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	VR	50	100	150	200	300	400	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	2						А
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I <sub>FSM</sub>	50						Α
Instantaneous Forward Voltage at 2A	V <sub>F</sub>	0.95				25	V	
Reverse Current	I <sub>R</sub>	1					uA	
Typical Junction Capacitance  Measured at 1 MHz And Applied $V_R = 4V$	Сл	30 25					5	pF
Reverse Recovery Time(Note 1)	T <sub>RR</sub>	25					ns	
Typical Thermal Resistance (Note 2) (Note 3)	Røjl Røja	20 150					°C/W	
Operating Junction Temperature Range	TJ	-55 to +150					°C	
Storage Temperature Range	T <sub>STG</sub>	-55 to +150						°C

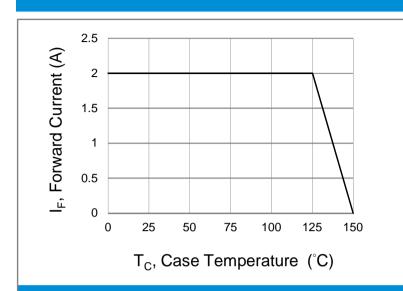
### NOTES:

- 1. Reverse Recovery Test Conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1A, Recover to 0.25A
- 2. Mounted on a FR4 PCB, single-sided copper, with 10cm\*10cm copper pad area
- 3. Mounted on a FR4 PCB, single-sided copper, standard footprint

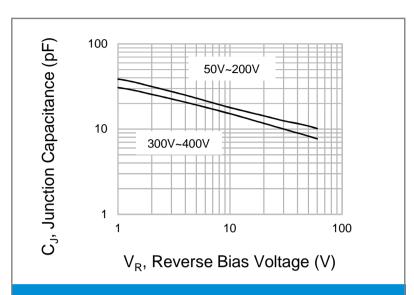




### TYPICAL CHARACTERISTIC CURVES



**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 

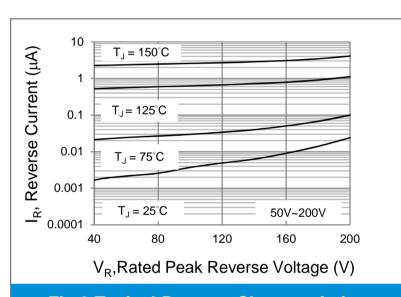


Fig.3 Typical Reverse Characteristics

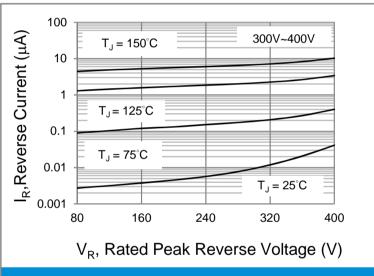
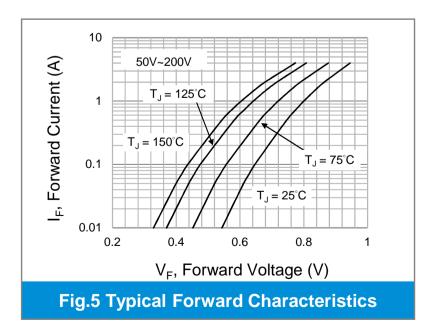
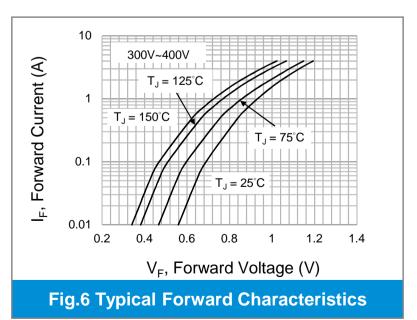


Fig.4 Typical Reverse Characteristics





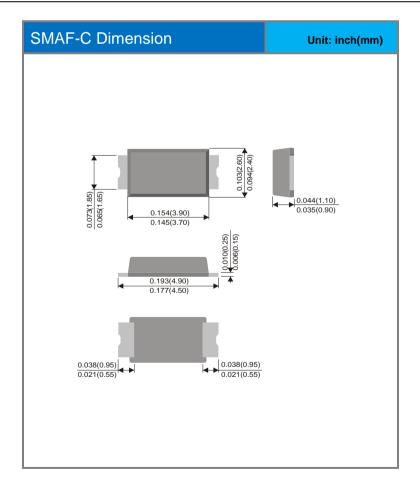


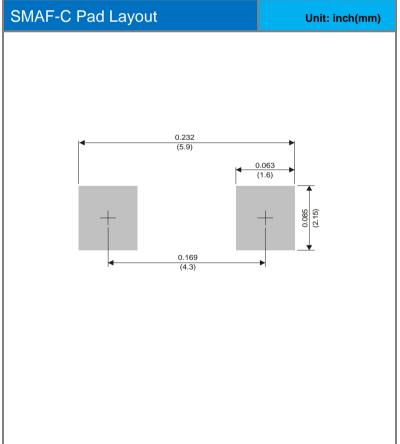


## Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
ERT2AAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2A	Halogen free
ERT2BAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2B	Halogen free
ERT2CAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2C	Halogen free
ERT2DAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2D	Halogen free
ERT2EAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2E	Halogen free
ERT2GAFC_R1_00001	SMAF-C	3K pcs / 7" reel	ERT2G	Halogen free

# Packaging Information & Mounting Pad Layout









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