



Unit: inch(mm)

## **ER2DAF**

### SURFACE MOUNT RECTIFIER

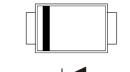
VOLTAGE 200 Volts CURRENT 2 Amperes

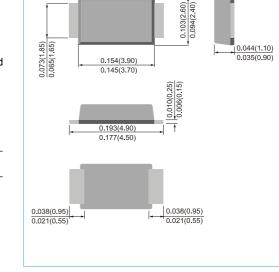
#### **FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- · For surface mounted applications
- Glass passivated junction
- Easy pick and place
- High temperature metallurgically bonden-no compression contacts as found in other diode-constructed rectifiers
- Ultra thin profile package for space constrained utilization
- · Package suitable for automated handling
- · Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **MECHANICAL DATA**

- · Case: Epoxy molded
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- · Approx. Weight: 0.0011 ounces, 0.0328 grams
- · Polarity: Color band denotes cathode end





SMAF

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Anode

Cathode

PARAMETER	SYMBOL	ER2DAF	UNITS
Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	200	V
RMS Voltage	V <sub>RMS</sub>	140	V
DC Blocking Voltage	V <sub>R</sub>	200	V
Average Forward Current	I <sub>F(AV)</sub>	2	А
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	50	А
Forward Voltage at 2.0A	V <sub>F</sub>	0.95	V
DC Reverse Current at Rated $T_J$ =25°C DC Blocking Voltage	I <sub>R</sub>	1	μА
Reverse Recovery Time (Note 3)	t <sub>rr</sub>	35	ns
Typical Junction capacitance VR=4V,1MHz	CJ	30	pF
Typical Thermal Resistance ,Junction to Lead (Note 1) Junction to Ambient (Note 2)	$R_{_{ heta JA}}$	25 150	°C / W
Operating Junction Temperature and Storage Temperature Ran	ge T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150	°C

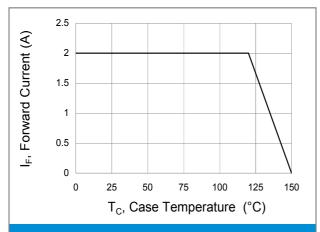
### NOTES:

- 1. Mounted on an FR4 PCB, single-sided copper, with 100cm<sup>2</sup>copper pad area.
- 2. Mounted on an FR4 PCB, single-sided copper, mini pad.
- 3.Reverse Recovery Test Conditions: I\_F=0.5A, I\_R=1.0A, Recover to 0.25A.





### **RATING AND CHARACTERISTIC CURVES**



**Fig.1 Forward Current Derating Curve** 

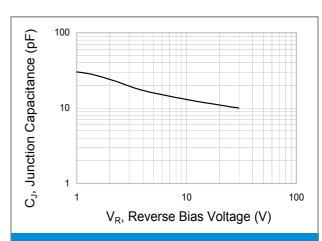


Fig.2 Typical Junction Capacitance

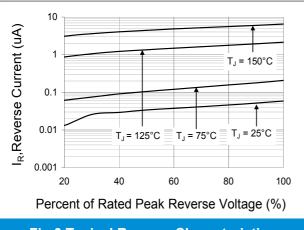


Fig.3 Typical Reverse Characteristics

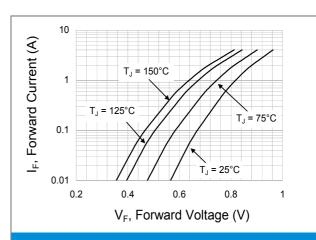
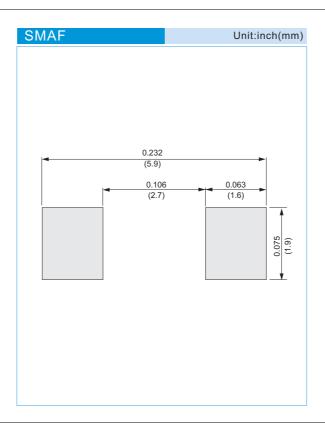


Fig.4 Typical Forward Characteristics





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information

T/R - 10K per 13" plastic Reel

T/R - 3K per 7" plastic Reel

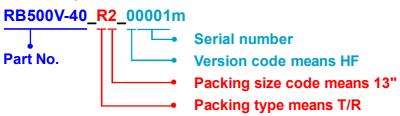




### Part No\_packing code\_Version

ÒÜGÖŒZ\_R1\_00001 ÒÜGÖŒZ\_R2\_00001

### For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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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