ER2A THRU ER2J

SURFACE MOUNT SUPER FAST RECOVERY RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 2.0 Ampere

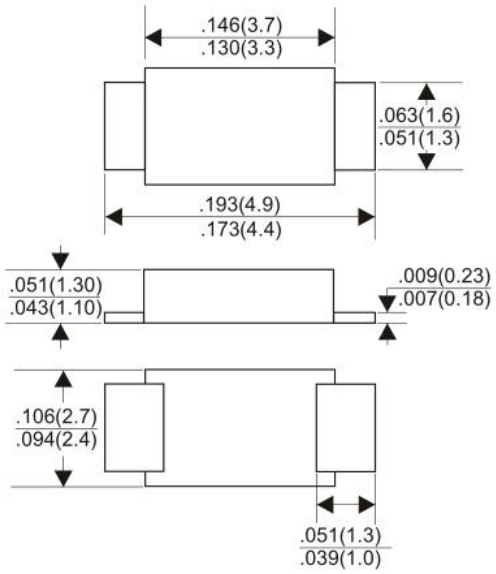
FEATURES

- ◆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
- ◆Approx.Weight: 27mg / 0.00095oz

SMAF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER		SYMBOL	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	150	200	300	400	600	VOLTS
Maximum RMS Voltage		V_{RMS}	35	70	105	140	210	280	420	VOLTS
Maximum DC Blocking Voltage		V_{DC}	50	100	150	200	300	400	600	VOLTS
Maximum Average Forward Rectified Current At TA =125℃		$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	50							Amps
Maximum instantaneous forward voltage per at 2.0A		V_F	1				1.25		1.70	VOLTS
Maximum DC Reverse Current at Rated DC blocking voltage	T_A=25℃	I_R	5.0							uA
	T_A=125℃		100							
Maximum Reverse Recovery Time Test conditions I_F=0.5A, I_R=1.0A, I_{RR}=0.25A		t_{rr}	30							nS
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)		C_J	30							pF
Typical Thermal Resistance		$R_{\theta JA}$	65							℃/W
		$R_{\theta JL}$	20							
Operating Junction Temperature		T_J	-55 to +150							℃
Storage Temperature Rang		T_{STG}	-55 to +150							℃

Note: 1. Thermal resistance from Junction to ambient and from junction to lead mounted on P.C.B. with 2.0 × 2.0″ (5.0 × 5.0cm) copper pad areas.

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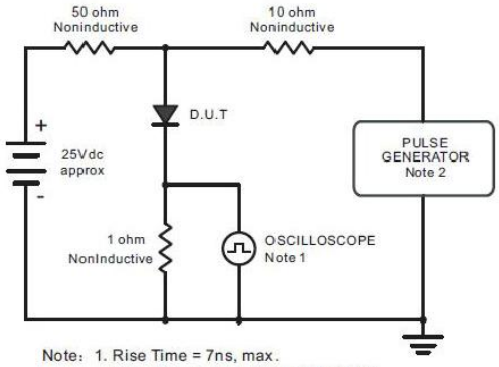
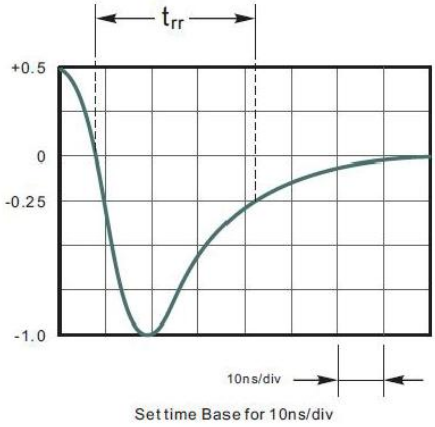
RATING AND CHARACTERISTIC CURVES ER2A THRU ER2J



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



Set time Base for 10ns/div

Fig.2 Maximum Average Forward Current Rating

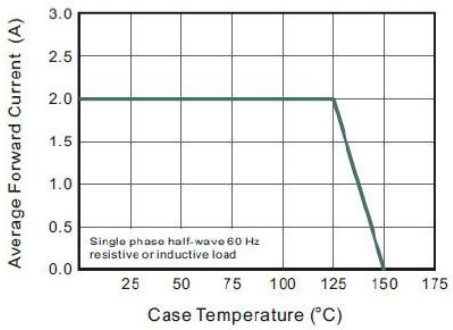


Fig.3 Typical Reverse Characteristics

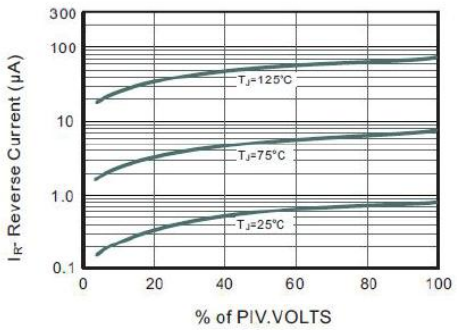


Fig.4 Typical Forward Characteristics

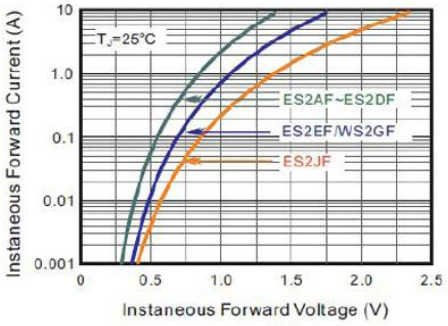


Fig.5 Typical Junction Capacitance

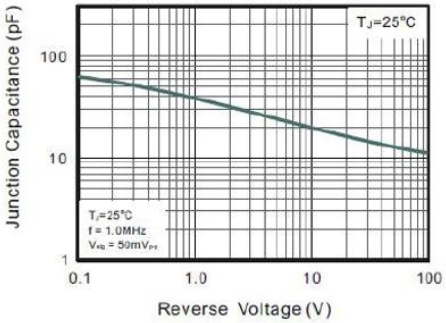
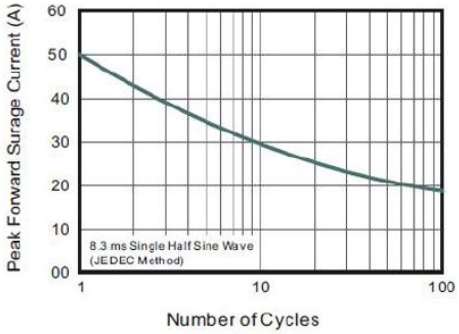


Fig.6 Maximum Non-Repetitive Peak Forward Surage Current



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.