



TAYCHIPST

SURFACE MOUNT SUPER FAST RECTIFIERS

ER2A THRU ER2J

50V-600V 2.0A

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
- High temperature soldering: 260 C /10 seconds at terminals

MECHANICAL DATA

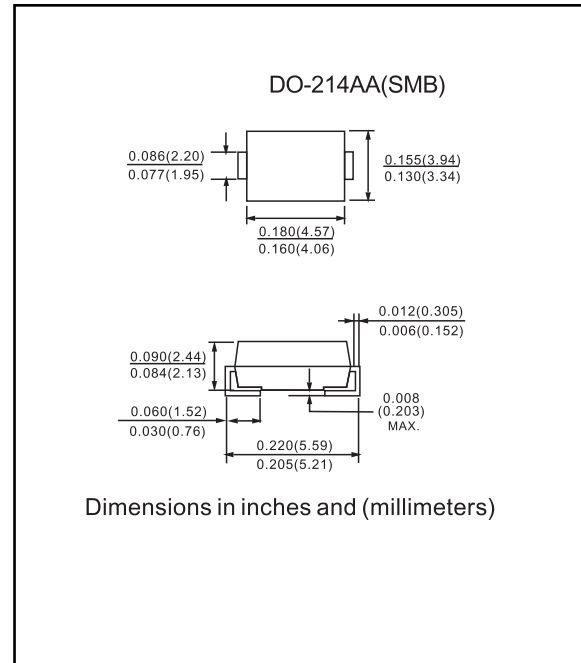
Case: JEDEC DO-214AA molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Indicated by cathode band

Standard packaging: 12mm tape (EIA-481)

Weight: 0.003 ounce, 0.093 gram



Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Characteristic	Symbol	ER2A	ER2B	ER2C	ER2D	ER2E	ER2G	ER2J	Unit
Peak Repetitive Reverse Voltage	V_{RRM}								
Working Peak Reverse Voltage	V_{RWM}	50	100	150	200	300	400	600	V
DC Blocking Voltage	V_R								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	105	140	210	280	420	V
Average Rectified Output Current @ $T_L = 110^{\circ}\text{C}$	I_O	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage @ $I_F = 2.0\text{A}$	V_{FM}	0.95				1.25		1.7	V
Peak Reverse Current @ $T_A = 25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^{\circ}\text{C}$	I_{RM}					5.0		500	μA
Reverse Recovery Time (Note 1)	t_{rr}					35			nS
Typical Junction Capacitance (Note 2)	C_j					25			pF
Typical Thermal Resistance (Note 3)	$R_{\theta JL}$					20			K/W
Operating and Storage Temperature Range	T_j, T_{STG}					-65 to +150			$^{\circ}\text{C}$

Note: 1. Measured with $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{rr} = 0.25\text{A}$,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.

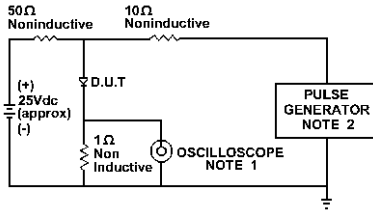


TAYCHIPST

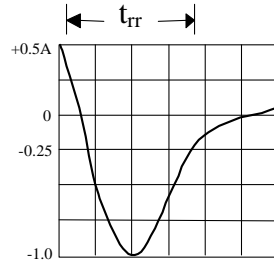
SURFACE MOUNT SUPER FAST RECTIFIERS

ER2A THRU ER2J

50V-600V 2.0A



NOTE: 1. Rise Time = 7ns max.
 Input Impedance = 1 megohm. 22pF
 2. Rise Time = 10ns max.
 Source Impedance = 50 Ohms



SET TIME BASE FOR
 50 ns/cm

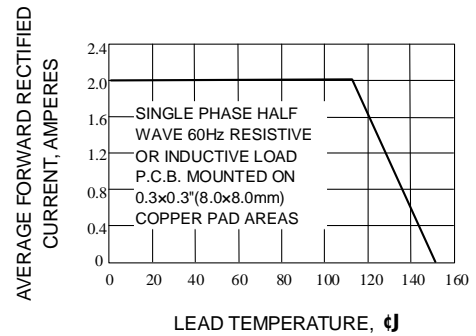


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

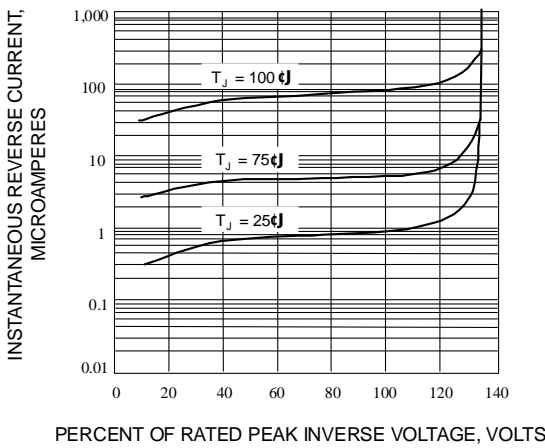


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

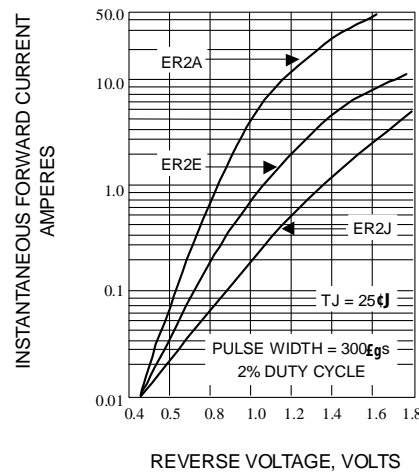


Fig. 4-TYPICAL FORWARD CHARACTERISTICS

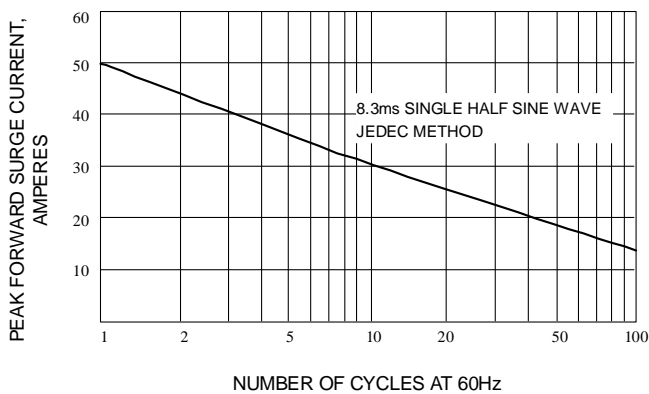


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

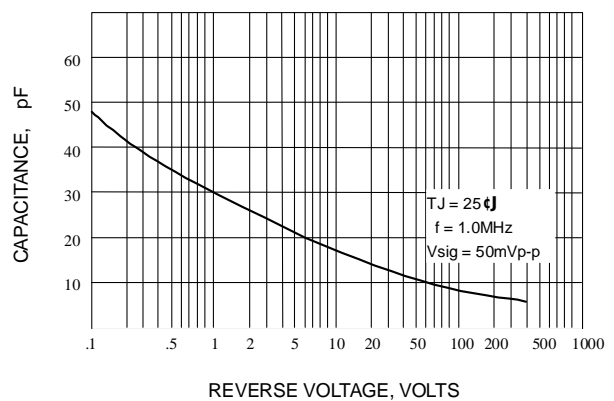


Fig. 6-TYPICAL JUNCTION CAPACITANCE