



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

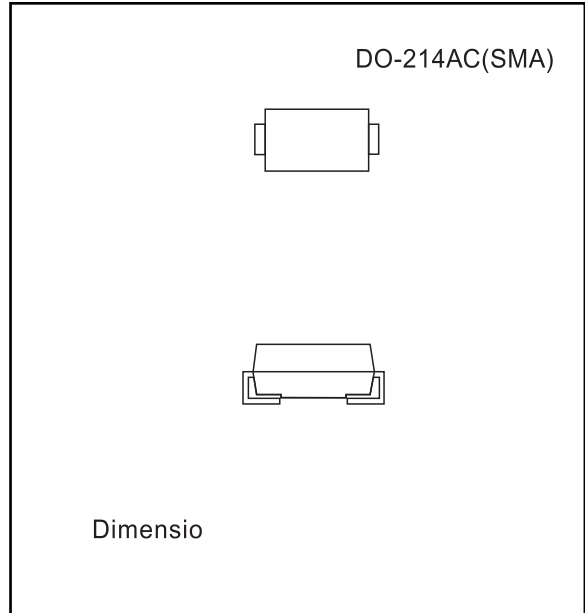
Case: JEDEC DO-214AC molded plastic

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

Characteristic	Symbol	ER1A	ER1B	ER1C	ER1D	ER1E	ER1G	ER1J	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 = 100°C	I _O	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								A
Forward Voltage @I _F = 1.0A	V _{FM}	0.95				1.25		1.7	V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}					5.0			μA	
						500				
Reverse Recovery Time (Note 1)	t _{rr}					35			nS	
Typical Junction Capacitance (Note 2)	C _j					10			pF	
Typical Thermal Resistance (Note 3)	R _{θJL}					34			K/W	
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150							°C	

- Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
 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.



SURFACE MOUNT SUPER FAST RECTIFIERS

ER1A THRU ER1J

50V-600V 1.0A

RATINGS AND CHARACTERISTIC CURVES ER1A THRU ER1J

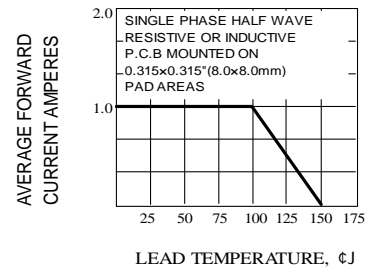
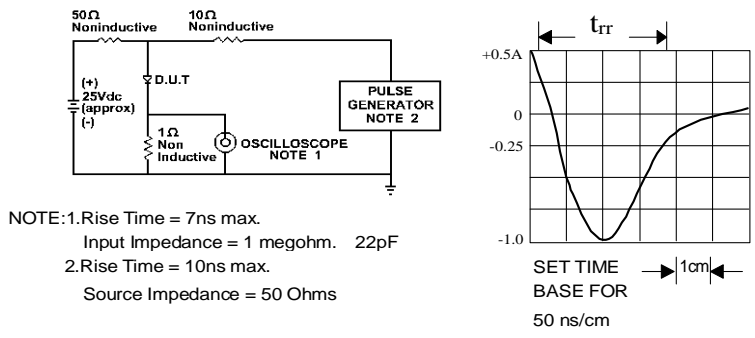


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

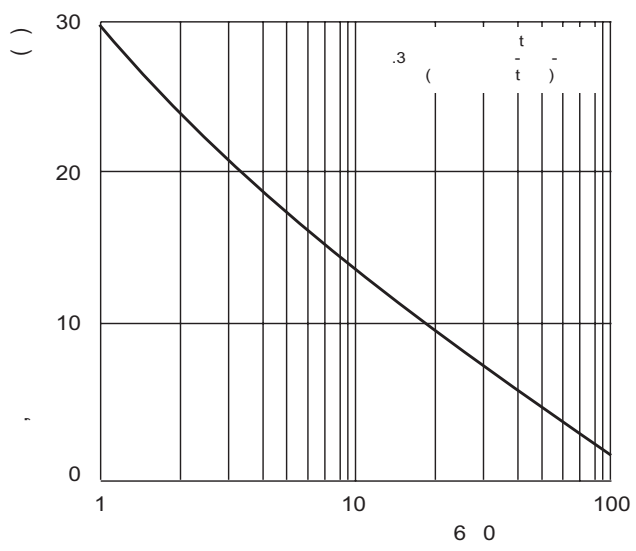
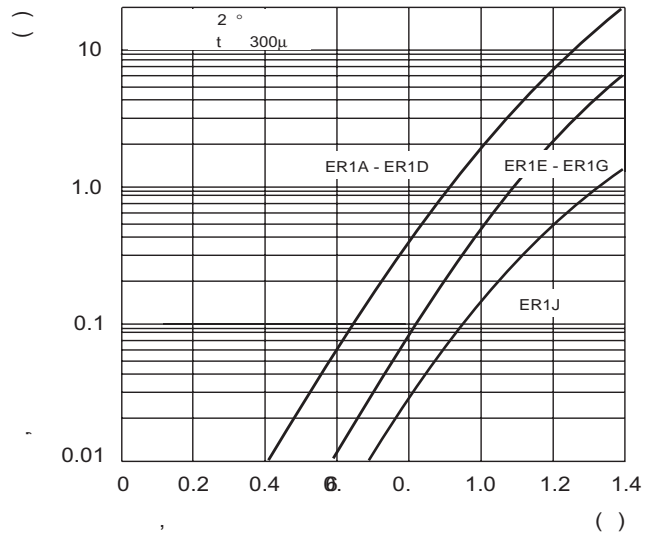


Fig.3 Typical Forward Characteristics

Fig.4 PEA FORWARD SURGE CURRENT

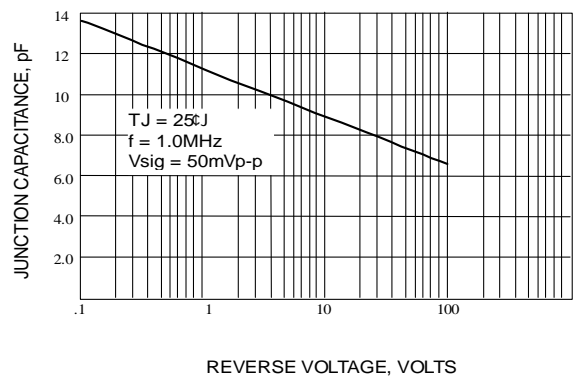


Fig. 5-TYPICAL JUNCTION CAPACITANCE