



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

ER1A
THRU
ER1J

TECHNICAL SPECIFICATIONS OF SUPER FAST RECOVERY RECTIFIER

VOLTAGE RANGE - 50 to 600 Volts

CURRENT - 1.0 Ampere

FEATURES

- * Ideal for surface mounted applications
- * Low leakage current
- * Glass passivated junction

MECHANICAL DATA

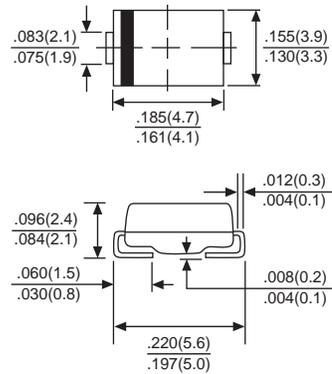
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.093 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SMB (DO-214AA)



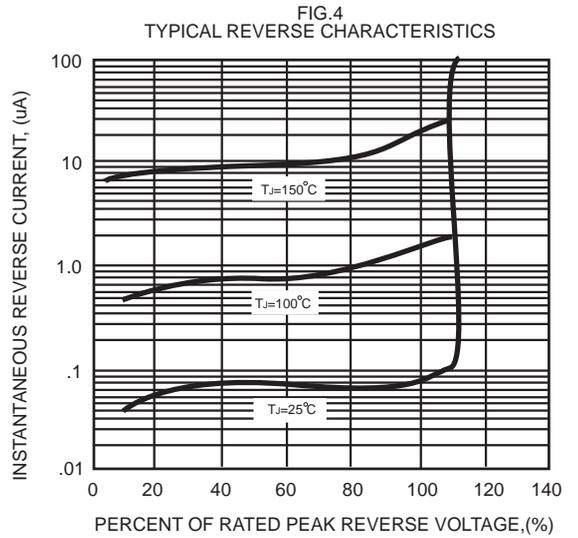
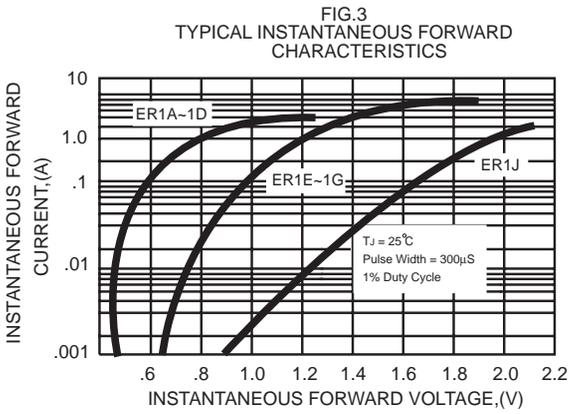
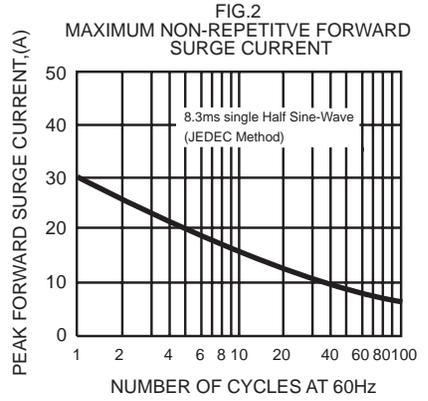
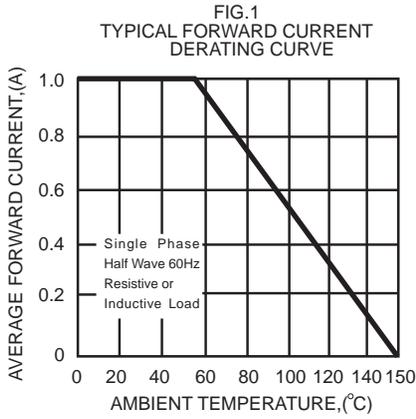
Dimensions in inches and (millimeters)

	SYMBOL	ER1A	ER1B	ER1C	ER1D	ER1E	ER1G	ER1J	UNITS	
Maximum Recurrent 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 = 55°C	I _O	1.0							Amps	
Peak Forward Surge Current I _{FSM} (surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30							Amps	
Maximum Forward Voltage at 1.0A DC	V _F	0.95				1.25		1.7	Volts	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I _R	@ TA = 25°C			5.0					μAmps
		@ TA = 100°C			100					
Maximum Reverse Recovery Time (Note 1)	t _{rr}	35							nSec	
Typical Junction Capacitance (Note 2)	C _J	34							pF	
Typical Thermal Resistance (Note 1)	R _{θJL}	10							°C/W	
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +150							°C	

NOTES : 1. Test Conditions: 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 volts.

RATING AND CHARACTERISTIC CURVES (ER1A THRU ER1J)



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