

# ER302D THRU ER303D

## DPAK SURFACE MOUNT SUPERFAST RECTIFIER VOLTAGE - 200 to 300 Volts CURRENT - 3.0 Amperes

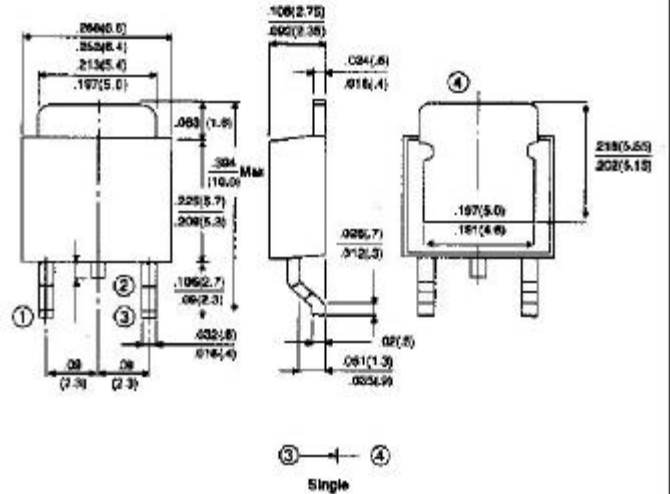
### FEATURES

- 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 /10 seconds at terminals

### D PAK/TO-252AA



### MECHANICAL DATA

Case: D PAK/TO-252AA molded plastic

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

Method 2026

Polarity: Color band denotes cathode

Standard packaging: 16mm tape (EIA-481)

Weight: 0.015 ounce, 0.4 gram

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25° ambient temperature unless otherwise specified.

Resistive or inductive load.

	SYMBOLS	ER302D	ER303D	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	300	Volts
Maximum RMS Voltage	$V_{RMS}$	140	210	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	300	Volts
Maximum Average Forward Rectified Current, at $T_C=75$	$I_{(AV)}$	3.0		Amps
Peak Forward Surge Current 8.3ms single half sine-Wave superimposed on rated load(JEDEC method)	$I_{FSM}$	75.0		Amps
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	$V_F$	0.95	1.25	Volts
Maximum DC Reverse Current $T_A=25$	$I_R$	5.0		A
At Rated DC Blocking Voltage $T_A=100$		0.2		
Maximum Thermal Resistance (Note 2)	R JC	6.0		/W
	R JA	80.0		
Maximum Reverse Recovery	$T_{RR}$	35.0		nS
Storage Temperature Range	$T_{STG}$	-50 to +150		

NOTES:

1. Pulse Test with PW=300 sec, 2% Duty Cycle.
2. Mounted on P.C.Board with 14mm<sup>2</sup> (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES

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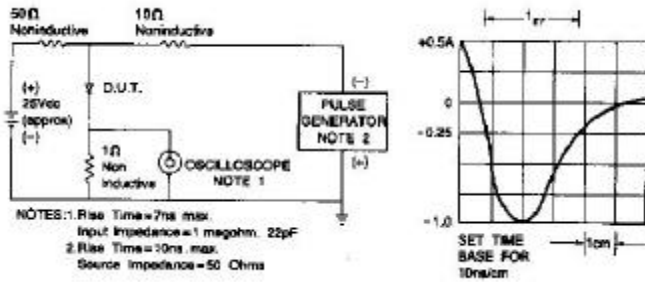


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

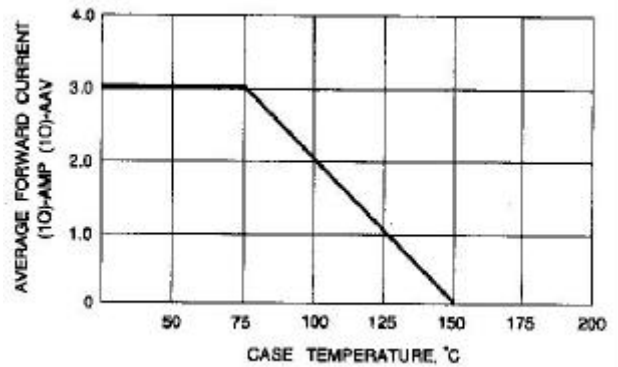


Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

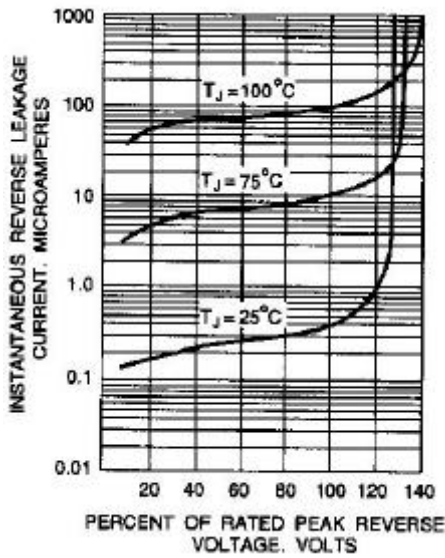


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

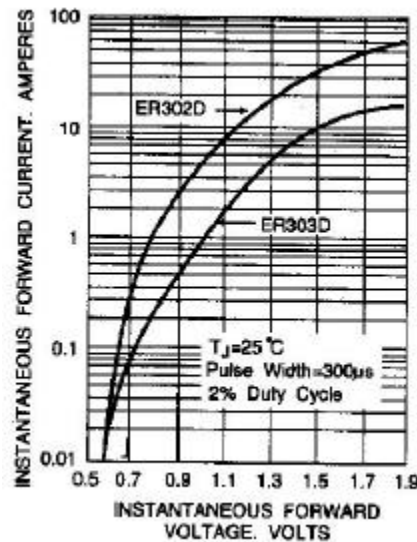


Fig. 4-TYPICAL FORWARD CAPACITANCE

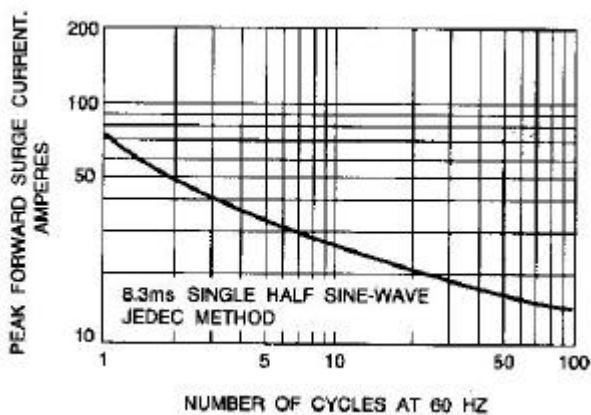


Fig. 5-MAXIMUM NON-REPETITIVE SURGE CURRENT

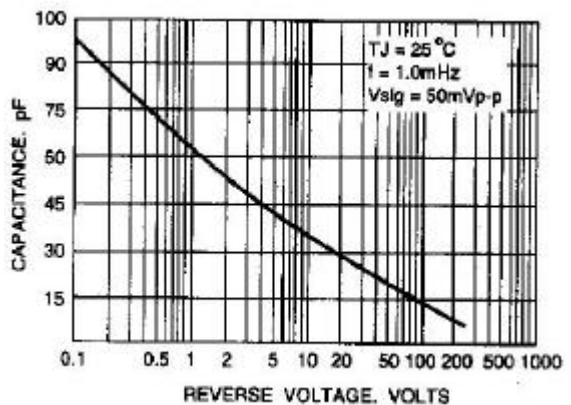


Fig. 6-TYPICAL JUNCTION CAPACITANCE