ER602DC THRU ER603DC

DPAK SURFACE MOUNT SUPERFAST RECTIFIER
VOLTAGE - 200 to 300 Volts CURRENT - 6.0 Amperes

FEATURES

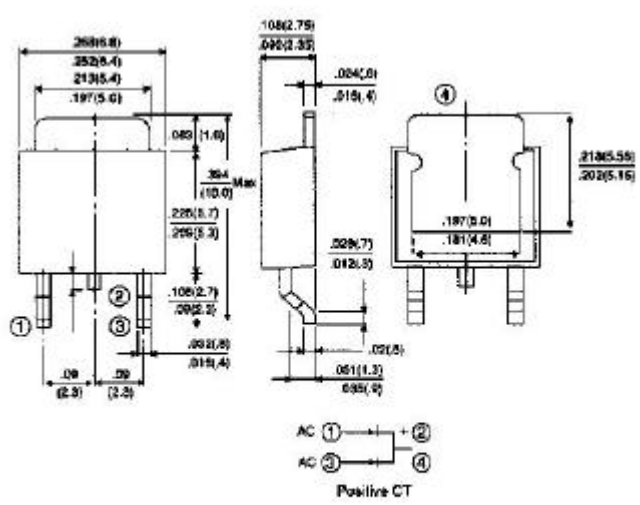
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Superfast recovery times for high efficiency
- Plastic package has Underwriters Laboratory

Flammability Classification 94V-O

- Glass passivated junction
- High temperature soldering:

260 /10 seconds at terminals

D PAK/TO-252AA



Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: D PAK/TO-252AA molded plastic

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

Polarity: Color bank 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	ER602DC	ER603DC	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	$I_{(AV)}$	per Diode 3.0 per Device 6.0		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 At Rated DC Blocking Voltage T_A=100	I_R	5.0 0.25		A mA
Maximum Thermal Resistance (Note 2)	R JC R JA	6.0 80.0		/W
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^2 (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES ER602DC THRU ER603DC

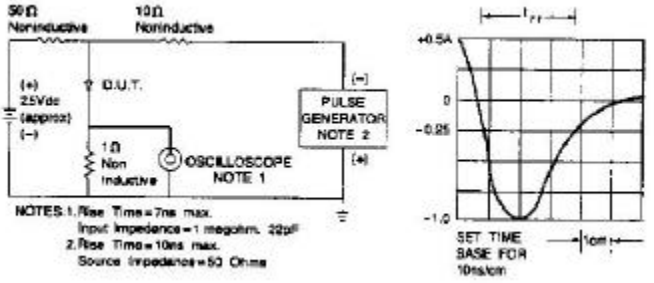


Fig. 1-REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

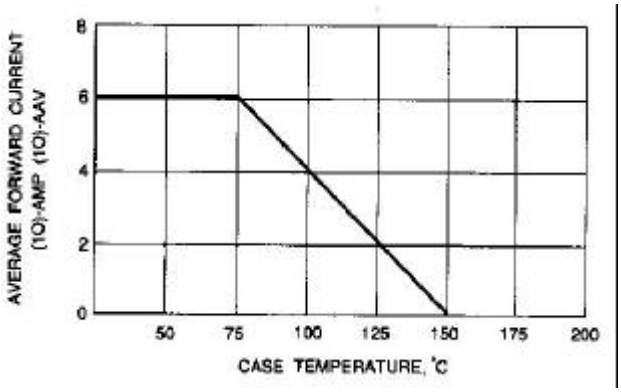


Fig. 2-MAXIMUM AVERAGE FORWARD CURRENT RATING

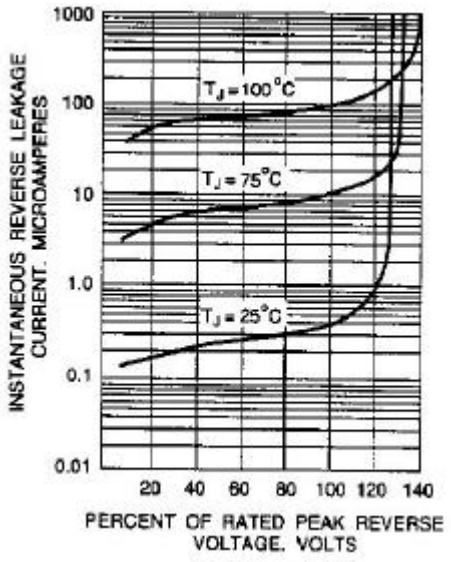


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

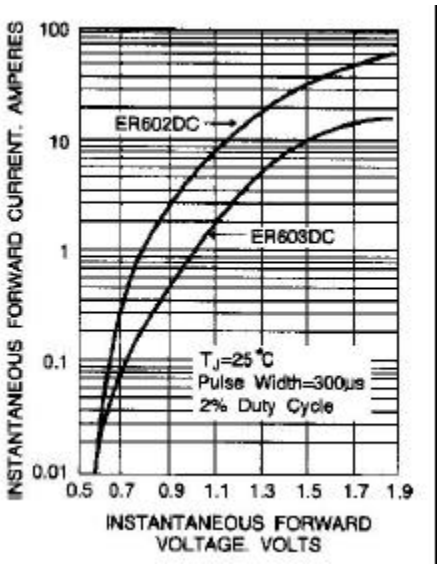


Fig. 4-TYPICAL FORWARD CAPACITANCE

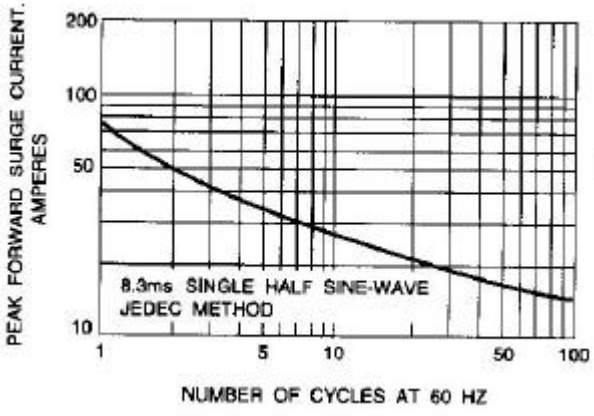


Fig. 5-MAXIMUM NON-REPETITIVE SURGE CURRENT

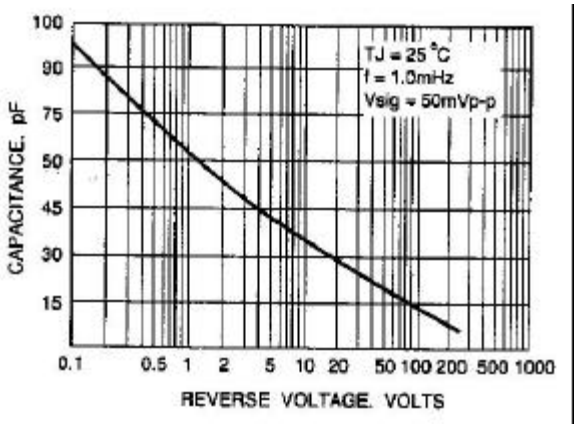


Fig. 6-TYPICAL JUNCTION CAPACITANCE