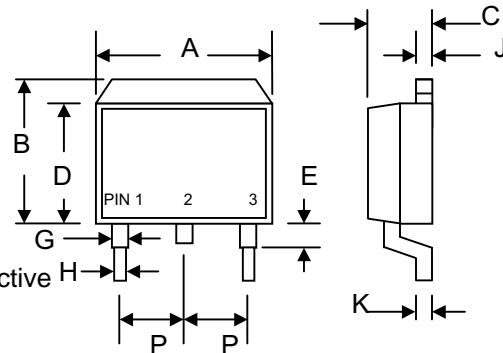


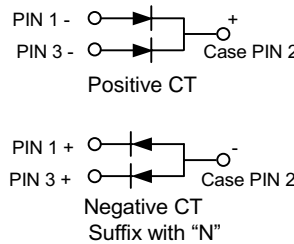
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Profile Package
- High Surge Current Capability
- Low Power Loss, High Efficiency
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O
- Green Products in Compliance with the RoHS Directive



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.7 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Standard Packaging: 24mm Tape (EIA-481)



D ² PAK/TO-263				
Dim	Min	Max	Min	Max
A	9.80	10.40	0.386	0.409
B	9.60	10.60	0.378	0.417
C	4.40	4.80	0.173	0.189
D	8.50	9.10	0.335	0.358
E	—	0.70	—	0.028
G	1.00	1.40	0.039	0.055
H	—	0.90	—	0.035
J	1.20	1.40	0.047	0.055
K	0.30	0.70	0.012	0.028
P	2.35	2.75	0.093	0.108
	In mm		In inch	

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ER 800D-G	ER 801D-G	ER 801AD-G	ER 802D-G	ER 803D-G	ER 804D-G	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	150	200	300	400	V
Working Peak Reverse Voltage	V _{RWM}							
DC Blocking Voltage	V _R							
RMS Reverse Voltage	V _{R(RMS)}	35	70	105	140	210	280	V
Average Rectified Output Current @T _C = 100°C	I _O	8.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	125						A
Forward Voltage @I _F = 8.0A	V _{FM}	0.95				1.3		V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	10				300		μA
Reverse Recovery Time (Note 1)	t _{rr}	35				50		nS
Typical Junction Capacitance (Note 2)	C _j	70				50		pF
Operating and Storage Temperature Range	T _j , T _{STG}	-50 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 4.0V D.C.

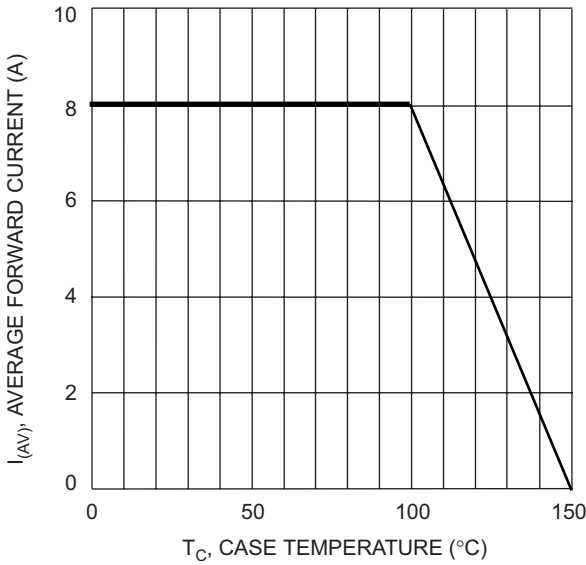


Fig. 1 Forward Current Derating Curve

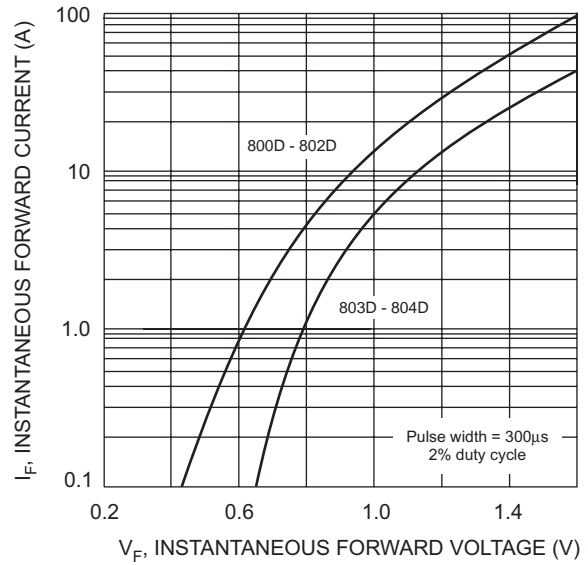


Fig. 2 Typical Forward Characteristics

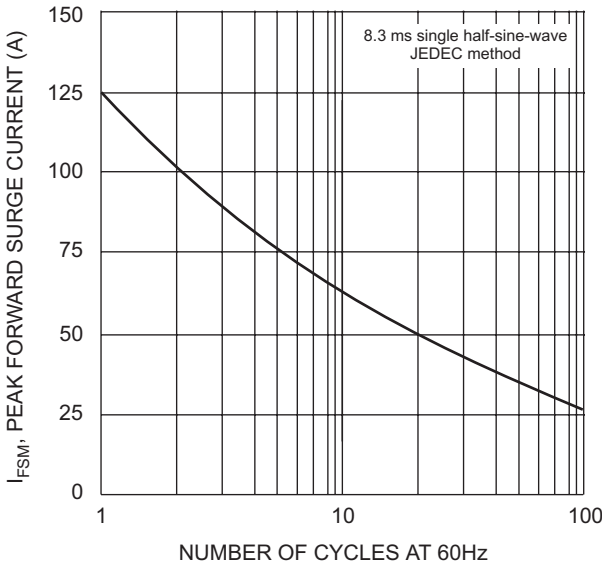


Fig. 3 Max Non-Repetitive Surge Current

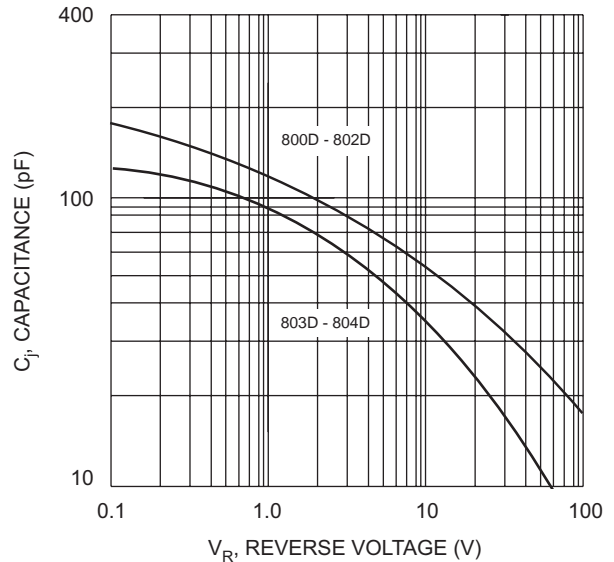


Fig. 4 Typical Junction Capacitance

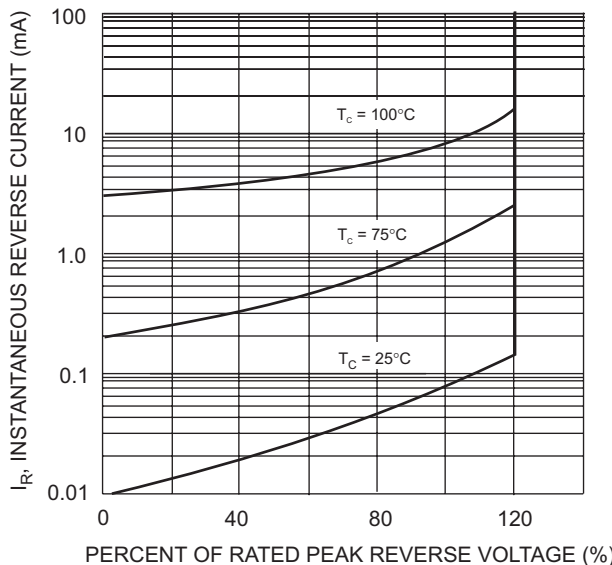


Fig. 5 Typical Reverse Characteristics

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