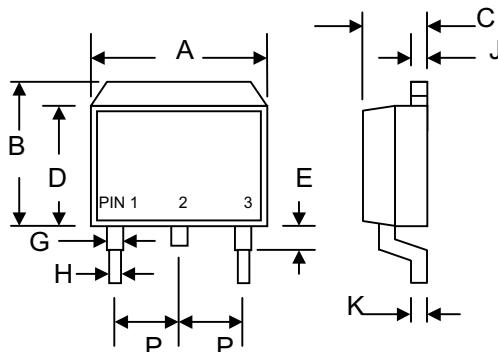


**Data Sheet 2659 Rev.—**

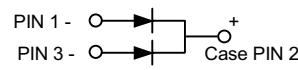
**Features**

- 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



**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 <sup>2</sup> PAK/TO-263		
Dim	Min	Max
A	9.8	10.4
B	9.6	10.6
C	4.4	4.8
D	8.5	9.1
E	—	0.7
G	1.0	1.4
H	—	0.9
J	1.2	1.4
K	0.3	0.7
P	2.35	2.75
All Dimensions in mm		

**Maximum Ratings and Electrical Characteristics** @T<sub>A</sub>=25°C unless otherwise specified

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

Characteristic	Symbol	FESB 8AT	FESB 8BT	FESB 8CT	FESB 8DT	FESB 8FT	FESB 8GT	Unit
Peak Repetitive Reverse Voltage	V <sub>RMM</sub>							
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	150	200	300	400	V
DC Blocking Voltage	V <sub>R</sub>							
RMS Reverse Voltage	V <sub>R</sub> (RMS)	35	70	105	140	210	280	V
Average Rectified Output Current @T <sub>C</sub> = 100°C	I <sub>O</sub>							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>							A
Forward Voltage @I <sub>F</sub> = 8.0A	V <sub>FM</sub>							V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>							µA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>							nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>							pF
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>					-50 to +150		°C

Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

**Data Sheet 2659 Rev.—**

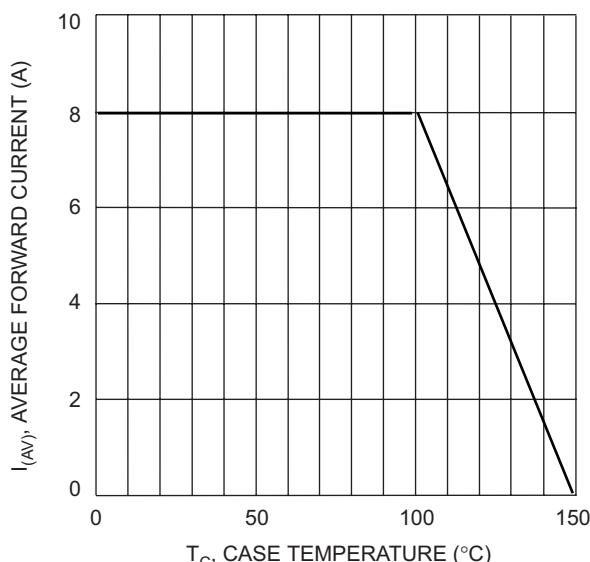


Fig. 1 Forward Current Derating Curve

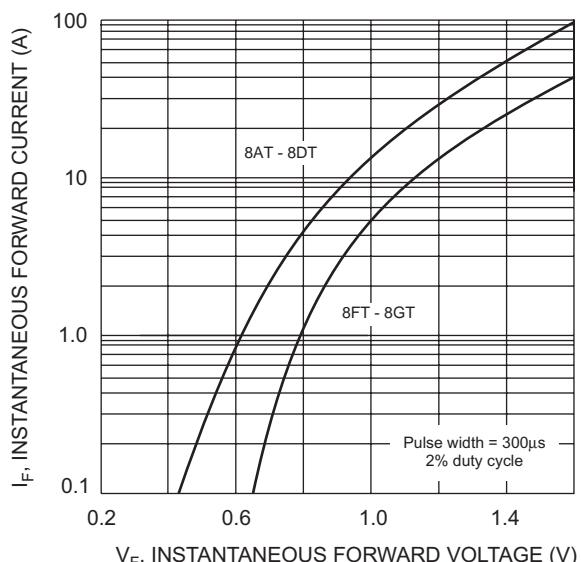


Fig. 2 Typical Forward Characteristics

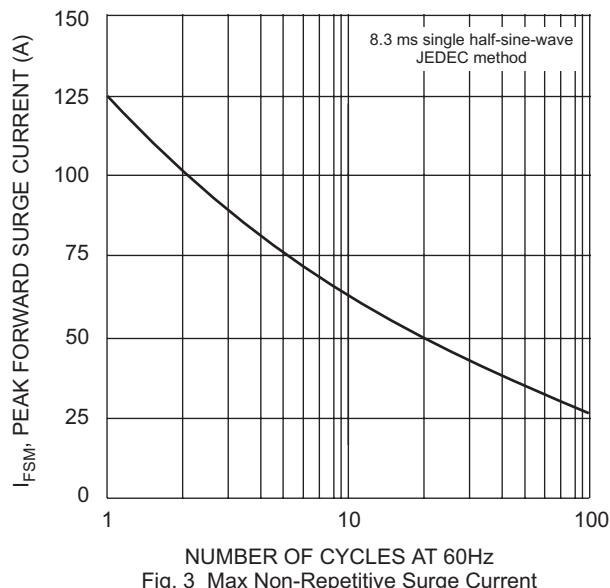


Fig. 3 Max Non-Repetitive Surge Current

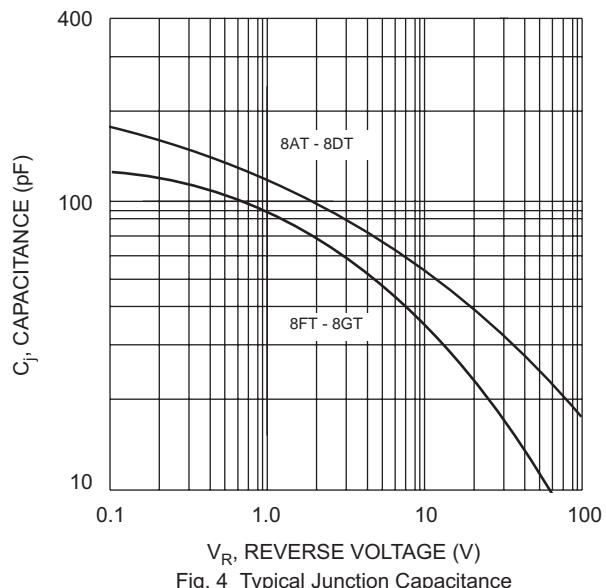


Fig. 4 Typical Junction Capacitance

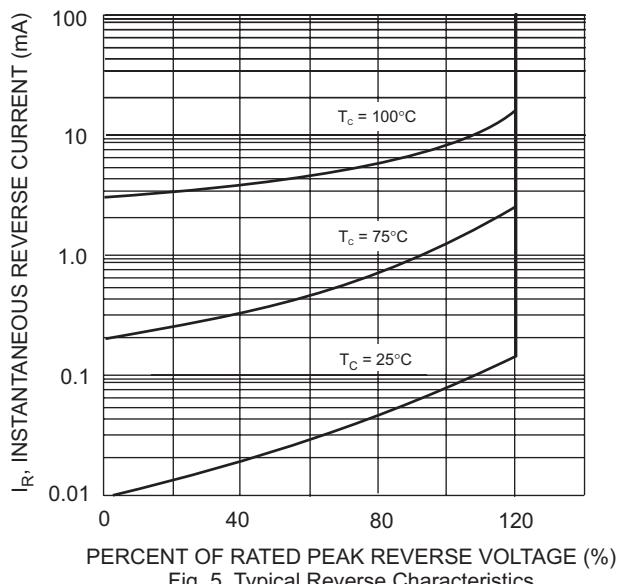


Fig. 5 Typical Reverse Characteristics