

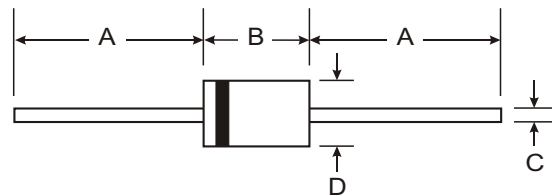
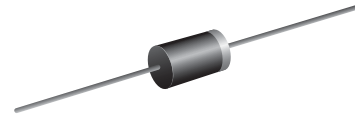
**VOLTAGE RANGE: 2000V**  
**CURRENT: 1.0 A**

### Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability

### Mechanical Data

- Case: DO-41 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.35 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
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	EM520	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>VRWM</sub> V <sub>R</sub>	2000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	1400	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 75°C	I <sub>O</sub>	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30	A
Forward Voltage @ I <sub>F</sub> = 1.0A	V <sub>FM</sub>	1.1	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>	5.0 500	μA
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	15	pF
Typical Thermal Resistance Junction to Ambient (Note 1)	R <sub>θJA</sub>	50	K/W
Operating Temperature Range	T <sub>j</sub>	-65 to +125	°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150	°C

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case  
 2. Measured at 1.0 MHz and Applied Reverse Voltage of 4.0V D.C.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

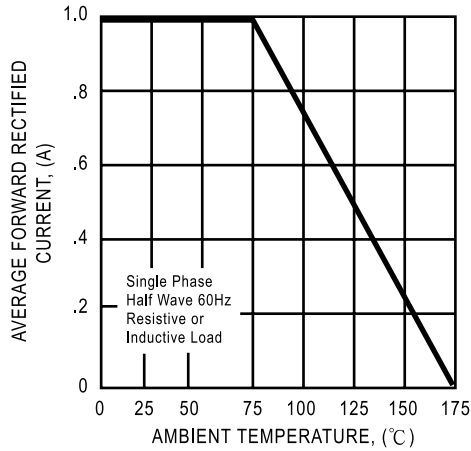


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

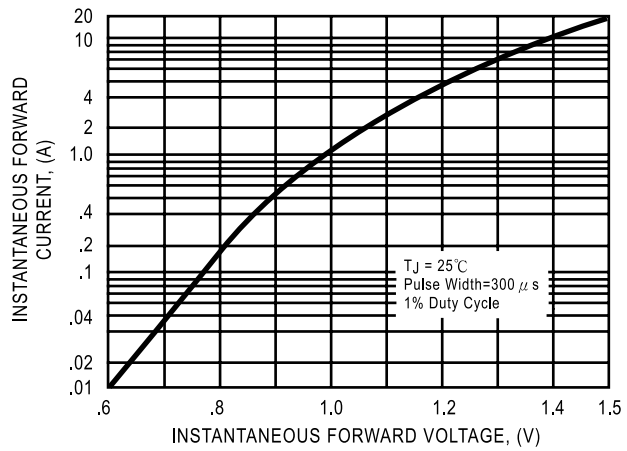


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

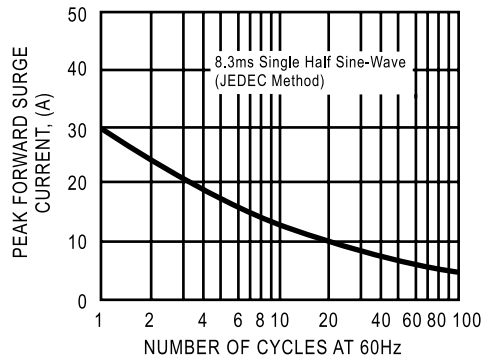


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

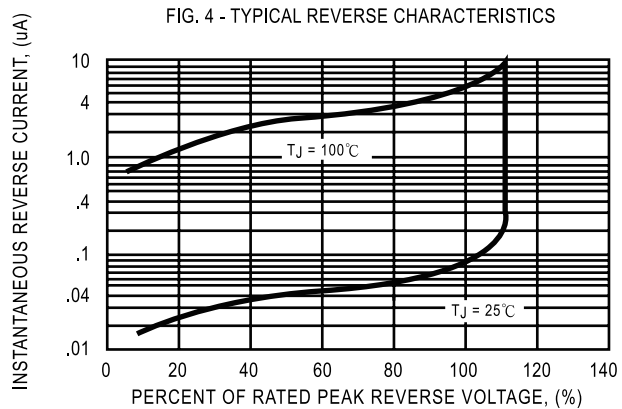


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

