



EM520

1.0 AMP. SILICON RECTIFIERS

Voltage Range
2000 Volts
Current
0.5 Amperes

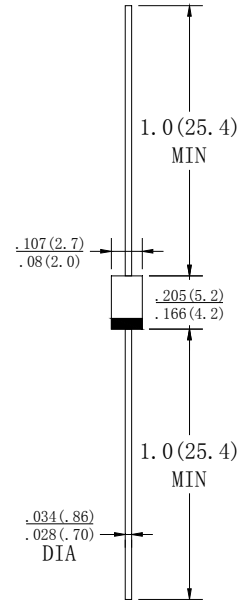
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FEATURES

- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

SYMBOL		EM520	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	2000	Volts
Maximum RMS Voltage	V _{RMS}	1400	Volts
Maximum DC Blocking Voltage	V _{DC}	2000	Volts
Maximum Average Forward Rectified Current at T _A = 75 C	I _O	0.5	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30	Amps
Maximum Instantaneous Forward Voltage at 0.5A DC	V _F	3.0	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25 C	5.0	uAmps
	@T _A = 100 C	500	
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at T _L = 75 C	I _R	30	uAmps
Typical Junction Capacitance (Note)	C _J	15	pF
Typical Thermal Resistance	R _{θJA}	50	°C/W
Operating and Storage Temperature Range	T _J STG	-65 to + 175	°C

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES

EM520



FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

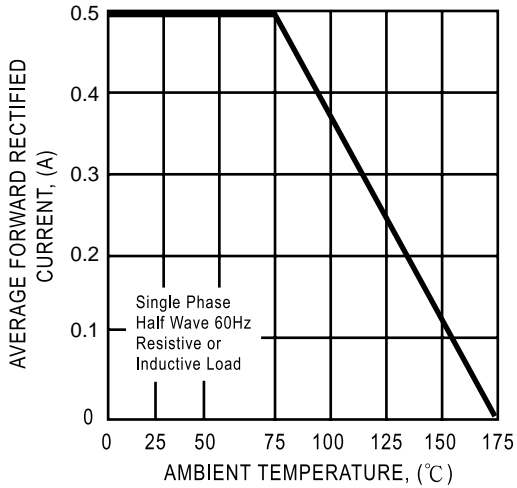


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

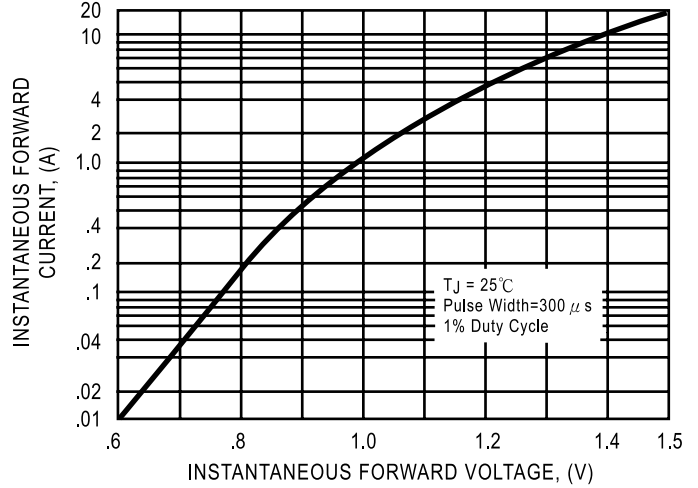


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

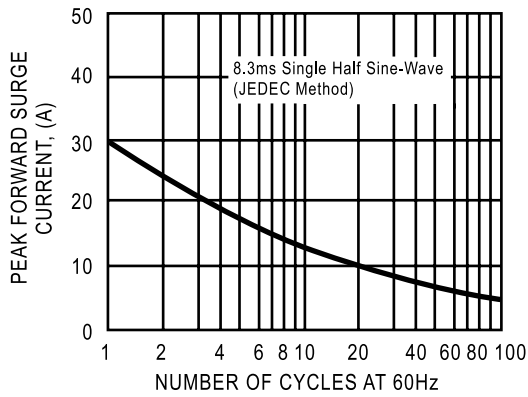


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

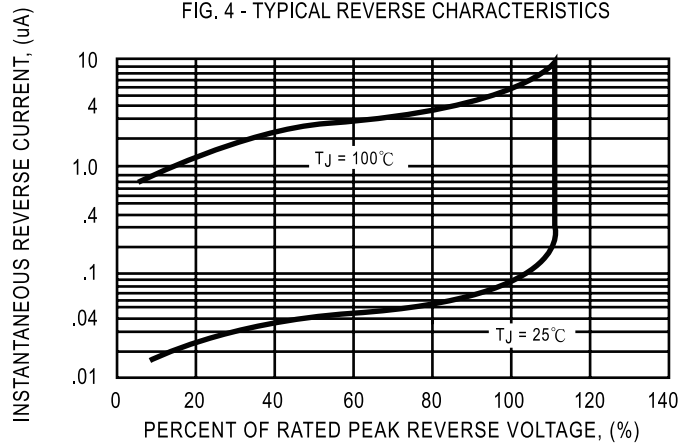


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

