
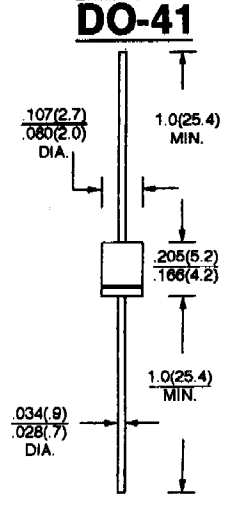


20 STERN AVE.
 SPRINGFIELD, NEW JERSEY 07081
 U.S.A.

**BY127, BY133
 EM513, EM516, EM520
 0.25 TO 0.5AMP
 SILICON RECTIFIERS**

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 <p>FEATURES</p> <ul style="list-style-type: none"> * Low forward voltage drop * High current capability * High reliability * High surge current capability <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> * Case: Molded plastic * Epoxy: UL 94V-0 rate flame retardant * Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed * Polarity: Color band denotes cathode end * Mounting Position: Any * Weight: 0.34 grams 	<p style="text-align: center;">VOLTAGE RANGE 1250 to 2000 Volts CURRENT 0.5 Ampere</p> <p style="text-align: center;">DO-41</p>  <p style="text-align: center;">Dimensions in inches and (millimeters)</p>
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MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
 Rating 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%

TYPE NUMBER	SYMBOLS	BY127	BY133	EM513	EM516	EM520	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1250	1400	1600	1800	2000	V
Maximum RMS Voltage	V_{RMS}	875	910	1120	1260	1400	V
Maximum D. C Blocking Voltage	V_{OC}	1250	1300	1600	1800	2000	V
Maximum Average Forward Rectified Current <small>.375" (9.5mm) lead length @ $T_A = 50^\circ C$</small>	$I_{F(AV)}$	0.5					A
Peak Forward Surge Current, 8.3 ms single half sine - wave <small>superimposed on rated load (JEDEC method)</small>	I_{FSM}	25					A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.0		1.1			V
Maximum D. C Reverse Current @ $T_A = 25^\circ C$ <small>At Rated D. C Blocking Voltage @ $T_A = 100^\circ C$</small>	I_R	5.0 80.0		5.0 100			μA μA
Typical Junction Capacitance (Note 1)	C_J	8		6			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	80		110			$^\circ C/W$
Operation Temperature Range	T_J	- 65 to + 125					$^\circ C$
Storage Temperature Range	T_{STG}	- 65 to + 125					$^\circ C$

NOTE: (1) Measured at 1 MHz and applied reverse voltage of 4.0 V. D. C.
 (2) Thermal resistance from Junction to Ambient 0.375" (9.5mm) Lead Length, P. C. B routed

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