PINGWEI ENTERPRISE

BY133 THRU EM520

1.0AMP. HIGH VOLTAGE SILICON RECTIFIER

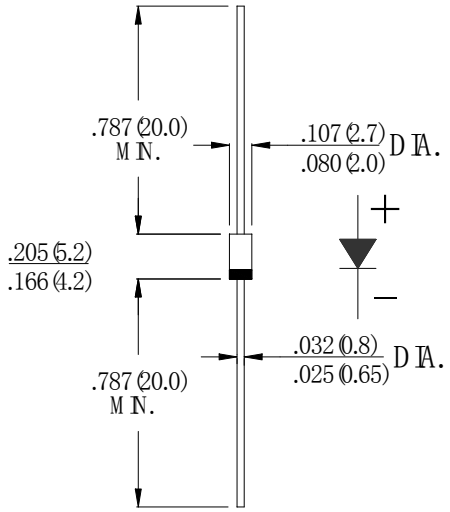
FEATURE

. High current capability
. Low forward voltage drop
. Low power loss, high efficiency
. High surge capability
. High voltage
. High temperature soldering guaranteed
260°C /10sec/ 0.375" lead length at 5 lbs tension

MECHANICAL DATA

. Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
. Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
. Polarity: color band denotes cathode
. Mounting position: any

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

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

Type Number	SYMBOL	BY133	EM513	EM516	EM520	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1300	1600	1800	2000	V
Maximum RMS Voltage	V_{RMS}	910	1120	1260	1400	V
Maximum DC blocking Voltage	V_{DC}	1300	1600	1800	2000	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at T_A =55°C	$I_{F(AV)}$	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30				A
Maximum Instantaneous forward Voltage at 1.0A DC	V_F	1.1				V
Maximum DC Reverse Current @T_A=25°C	I_R	5.0				μA
at rated DC blocking voltage @T_A =100°C		500				
Maximum Full Load Reverse Current Average, Full Cycle .375"(9.5mm) lead length at T_L=75°C		30				
Typical Junction Capacitance (Note1)	C_J	15				pF
Typical Thermal Resistance (Note 2)	$R_{(JA)}$	75				°C/W
Storage Temperature Range	T_{STG}	-55 to +150				°C
Operation Temperature Range	T_J	-55 to +150				°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
2. Thermal Resistance from Junction to Ambient at 0.375"（9.5mm）lead length, vertical P.C. Board Mounted.