

### SUPER FAST RECTIFIERS

VOLTAGE RANGE: 200 --- 1000 V  
CURRENT: 1.0 A

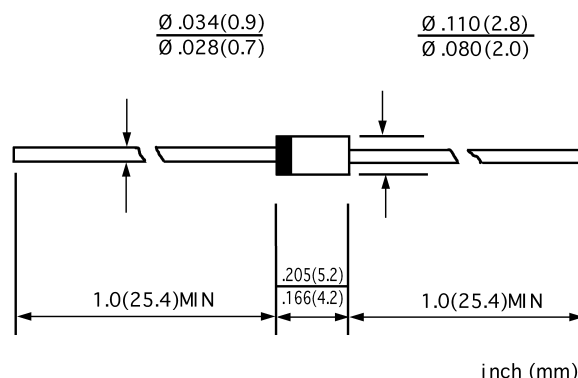
#### FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with alcohol, Isopropanol and similar solvents

#### MECHANICAL DATA

- ◇ Case: JEDEC DO-41, molded plastic
- ◇ Terminals: Axial lead, solderable per MIL- STD-202, Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces, 0.34 grams
- ◇ Mounting position: Any

#### DO - 41



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 50 Hz, resistive or inductive load. For capacitive load, derate by 20%.

		BYV26A	BYV26B	BYV26C	BYV26D	BYV26E	UNITS
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	200	400	600	800	1000	V
Maximum average forward rectified current 9.5 mm lead length, @T <sub>A</sub> =75°C	I <sub>F(AV)</sub>	1.0					A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T <sub>J</sub> =125°C	I <sub>FSM</sub>	30.0					A
Maximum instantaneous forward voltage @ 1.0A	V <sub>F</sub>	2.5					V
Maximum reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =100°C	I <sub>R</sub>	5.0 150.0					μ A
Maximum reverse recovery time (Note1)	t <sub>rr</sub>	30			75		ns
Typical junction capacitance (Note2)	C <sub>J</sub>	45			40		pF
Typical thermal resistance (Note3)	R <sub>θJA</sub>	100					°C/W
Operating junction temperature range	T <sub>J</sub>	- 55 ----- + 150					°C
Storage temperature range	T <sub>STG</sub>	- 55 ----- + 150					°C

NOTE: 1. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1\text{A}$ ,  $I_{rr}=0.25\text{A}$ .

2. Measured at 1MHz and applied reverse voltage of 4.0V DC.

3. Thermal resistance from junction to ambient.

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FIG.1 – FORWARD DERATING CURVE

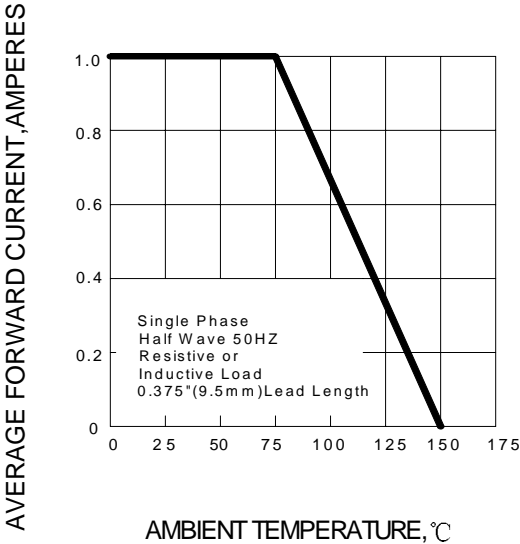


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

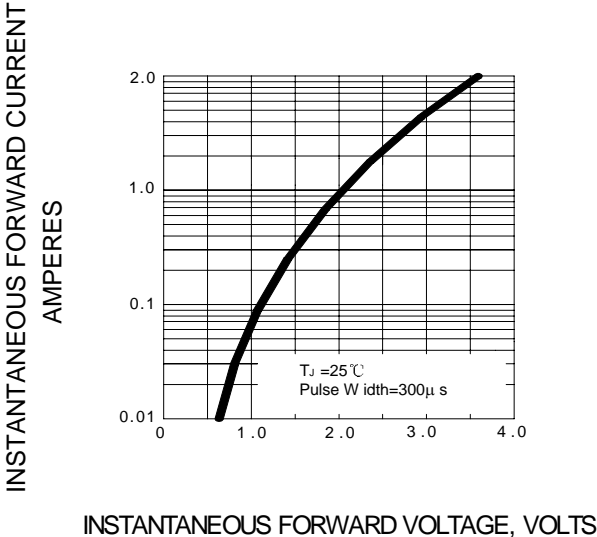


FIG.3 –PEAK FORWARD SURGE CURRENT

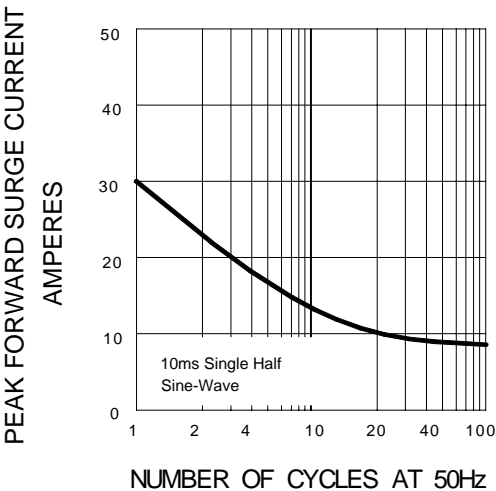


FIG.4 – TYPICAL JUNCTION CAPACITANCE

