

## SUPER FAST RECTIFIERS

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

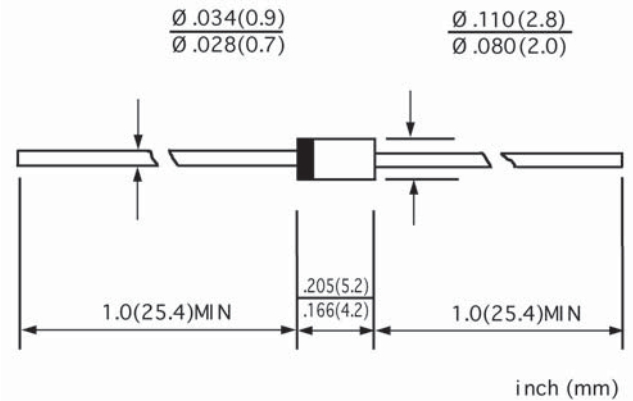
### FEATURES

- 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	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum average forward rectified current 9.5 mm lead length, @ $T_A=75^\circ C$	$I_{F(AV)}$	1.0					A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @ $T_J=125^\circ C$	$I_{FSM}$	30.0					A
Maximum instantaneous forward voltage @ 1.0A	$V_F$	2.5					V
Maximum reverse current @ $T_A=25^\circ C$ at rated DC blocking voltage @ $T_A=100^\circ C$	$I_R$	5.0 150.0					$\mu A$
Maximum reverse recovery time (Note1)	$t_{rr}$	30			75		ns
Typical junction capacitance (Note2)	$C_J$	45			40		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	100					$^\circ C/W$
Operating junction temperature range	$T_J$	- 55 ----- + 150					$^\circ C$
Storage temperature range	$T_{STG}$	- 55 ----- + 150					$^\circ C$

NOTE: 1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_r=0.25A$ .

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

3. Thermal resistance from junction to ambient.

# RATINGS AND CHARACTERISTIC CURVES

FIG.1 – FORWARD DERATING CURVE

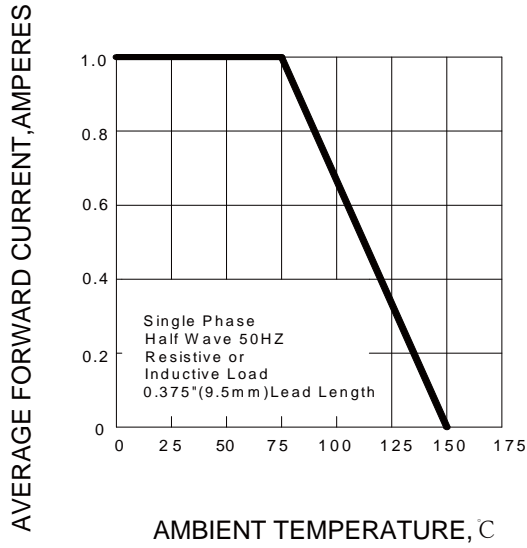


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

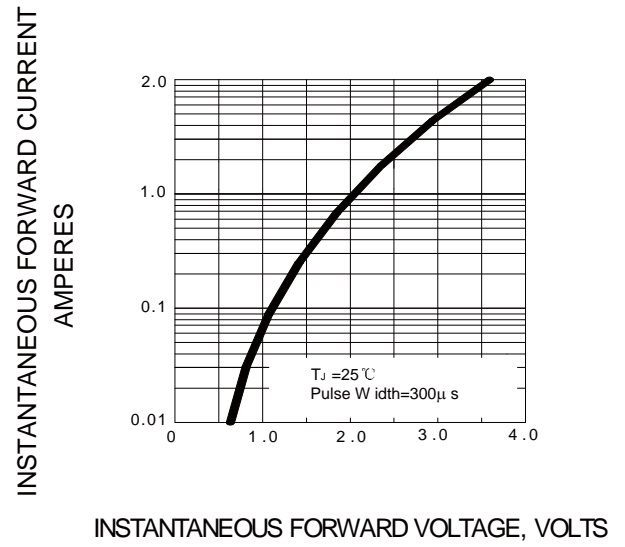


FIG.3 –PEAK FORWARD SURGE CURRENT

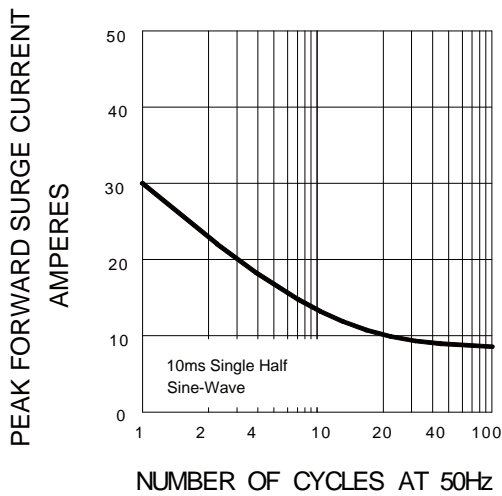


FIG.4 – TYPICAL JUNCTION CAPACITANCE

