

BYV26A - BYV26E

VERY FAST SOFT-RECOVERY AVALANCHE RECTIFIER DIODES

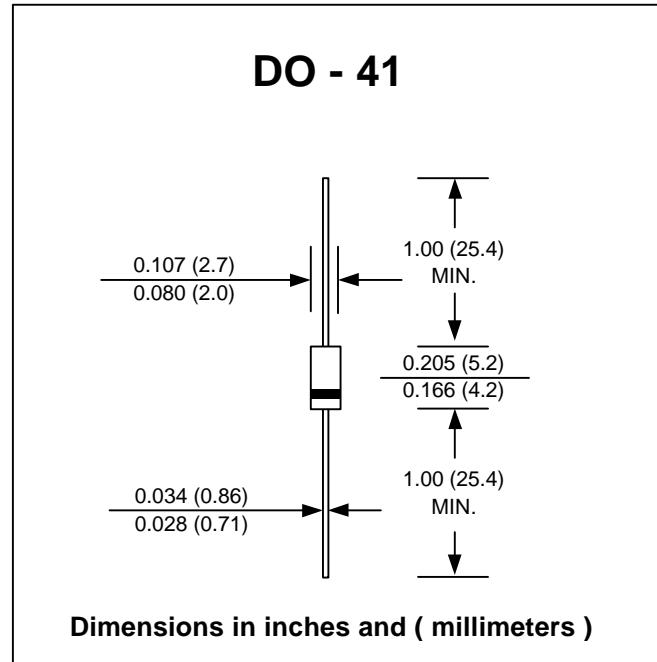
PRV : 200 - 1000 Volts
Io : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * Low reverse current
- * Low forward voltage drop
- * Fast switching for high efficiency
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : DO-41 Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.339 gram



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%.

RATING	SYMBOL	BYV26A	BYV26B	BYV26C	BYV26D	BYV26E	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1000	V
Maximum Continuous Reverse Voltage	V_R	200	400	600	800	1000	V
Minimum Reverse Avalanche Breakdown Voltage @ 100 μ A	$V_{(BR)R}$	300	500	700	900	1100	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	1.0					A
Maximum Non-Repetitive Peak Forward Current	I_{FSM}	30					A
Maximum Repetitive Peak Forward Current (Ttp = 85 °C)	I_{FRM}	10					A
Maximum Forward Voltage at 1.0 Amp. ; $T_J = 25\text{ }^\circ\text{C}$ $T_J = 175\text{ }^\circ\text{C}$	V_F	2.5					V
	V_F	1.3					V
Maximum Reverse Current $T_a = 25\text{ }^\circ\text{C}$ at Reverse Voltage $T_a = 100\text{ }^\circ\text{C}$	I_R	5.0					μ A
	$I_{R(H)}$	150					μ A
Maximum Reverse Recovery Time (Note 2)	T_{rr}	30		75			ns
Typical Thermal Resistance - Junction to Ambient	$R_{\theta JA}$	100					K/W
Junction Temperature Range	T_J	- 65 to + 175					$^\circ\text{C}$
Storage Temperature Range	T_{STG}	- 65 to + 175					$^\circ\text{C}$

Notes :

- (1) Ttp = 85 °C , lead length 10 mm.
- (2) Measured with $I_F = 0.5$ Amp, $I_R = 1.0$ A, $I_{rr} = 0.25$ A.

RATING AND CHARACTERISTIC CURVES (BYV26A - BYV26E)

FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM

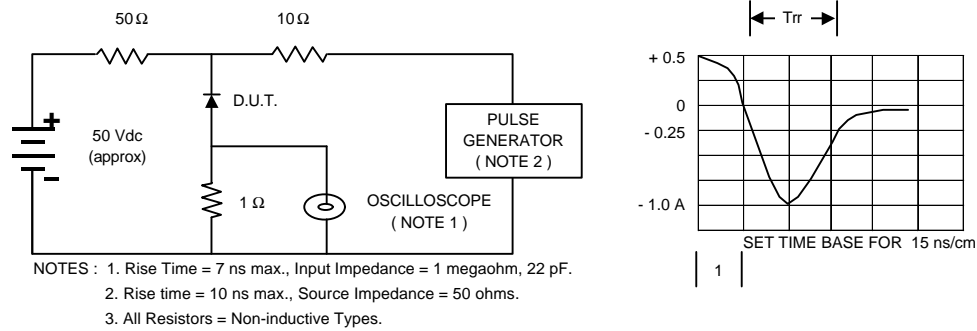


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

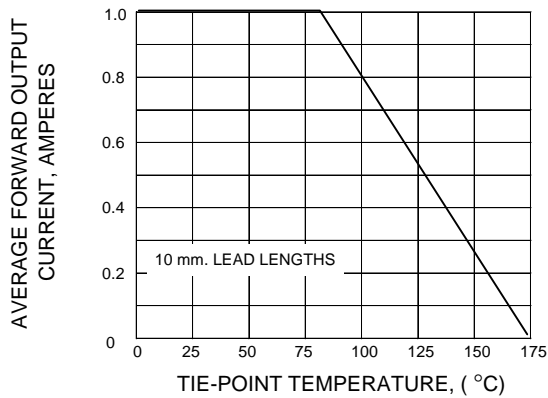


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

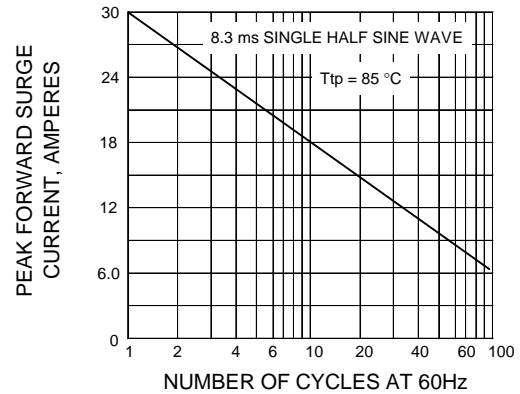


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

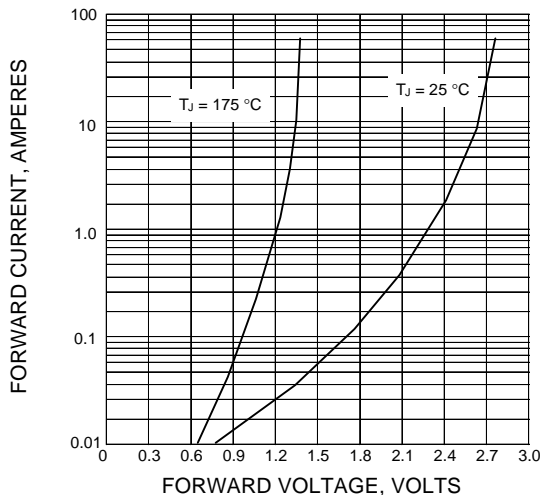


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

