

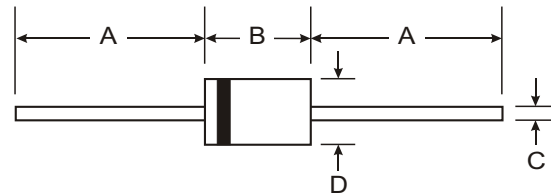
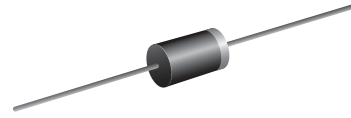
VOLTAGE RANGE: 200 - 1000V
CURRENT: 1.3 A

Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Fast switching for high efficiency

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



DO-41		
Dim	Min	Max
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	BYD 33D	BYD 33G	BYD 33J	BYD 33K	BYD 33M	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
Min. Reverse Avalanche Breakdown Voltage @ I _R = 0.1 mA	V _{(BR)R-min}	300	500	700	900	1100	V
Maximum Average Forward Current T _{tp} = 55 °C (Note 1)	I _{F(AV)}	1.3					A
Maximum Non-Repetitive Peak Forward Surge Current	I _{FSM}	20					A
Maximum Repetitive Peak Forward Current	I _{FRM}	12					A
Maximum Forward Voltage at 1.0 Amp.	V _F	1.3					V
Maximum Reverse Current at Reverse Voltage	I _R	1.0					μA
Maximum Reverse Current at Reverse Voltage T _j = 165 °C	I _{R(H)}	100					μA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	250			300		ns
Thermal Resistance - Junction to Ambient	R _{θJA}	120					K / W
Junction Temperature Range	T _J	- 65 to + 175					°C
Storage Temperature Range	T _{STG}	- 65 to + 175					°C

Notes :

- (1) Lead Length 10 mm.
- (2) Measured with I_F = 1 Amp to V_R ≥ 30V



FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC

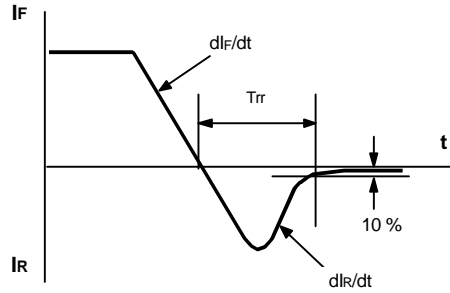


FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

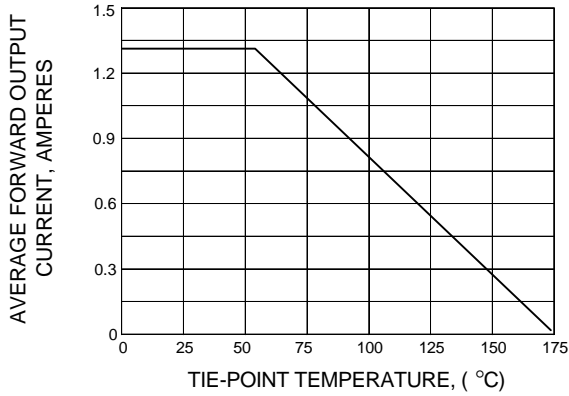


FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

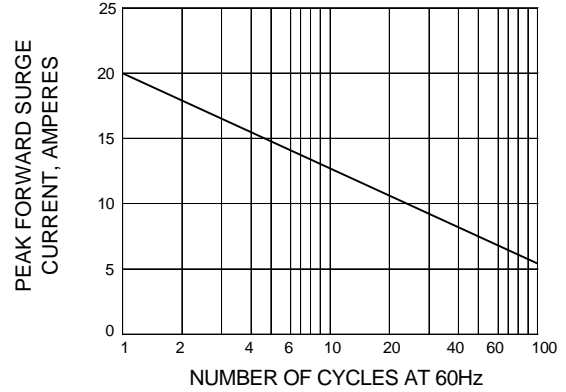


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

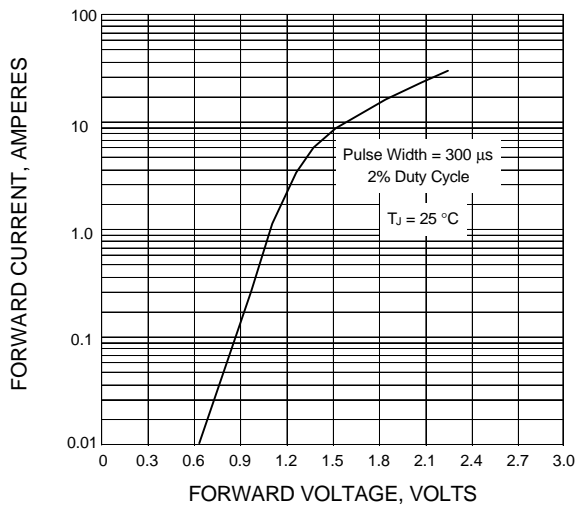


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

