

1.0 A Miniature Rectifier
Rectifier Reverse Voltage 200 to 1300V

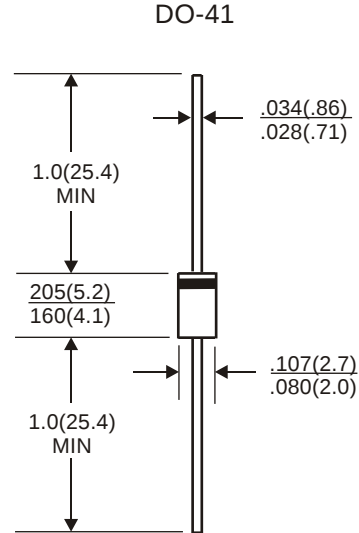


Features

- Diffused junction
- High current capability and low Forward Voltage Drop
- Surge overload rating to 30A peak
- Low reverse leakage current
- Plastic material has UL flammability classification 94V-0

Mechanical Data

Case: Molded plastic
Terminals: Solder plated solderable per MIL-STD-202, Method 208
Polarity: Cathode band
Mounting Position: Any
Weight: 0.3grams (approx)



All dimensions inches and (millimeters)

Maximum Ratings & Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified, Resistive or Inductive load, 60 Hz.
For Capacitive load derate current by 20%.

Parameter	Symbol	BY133	BY134	BY135	unit
Maximum non-repetitive peak reverse voltage	VRSM	1300	600	200	V
Maximum repetitive peak reverse voltage	VRRM	1300	600	200	V
Maximum RMS bridge input voltage	VRMS	910	420	140	V
Maximum DC blocking voltage	VDC	1300	600	200	V
Maximum average forward rectified output current at TA=75°C	IF(AV)	1.0			A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	30.0			A
Typical thermal resistance per element	ReJA	50			°C/W
Typical junction capacitance per element	Cj	30			pF
Operating junction and storage temperature range	TJ, TSTG	-55 to + 175			°C

Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.
For Capacitive load derate by 20 %.

Parameter	Symbol	BY133	BY134	BY135	Unit
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1			V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	5.0 50.0			μA

Rating and Characteristic Curves ($T_A = 25^{\circ}\text{C}$ Unless otherwise noted)

BY133 thru BY135

Fig. 1 Derating Curve for Output Rectified Current

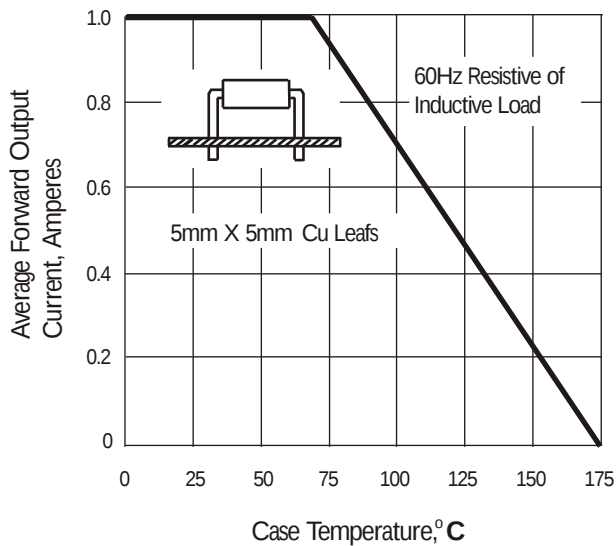


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

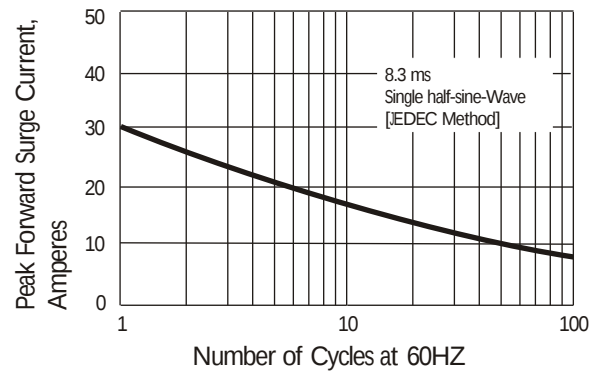


Fig. 3 Typical Instantaneous Forward Characteristics

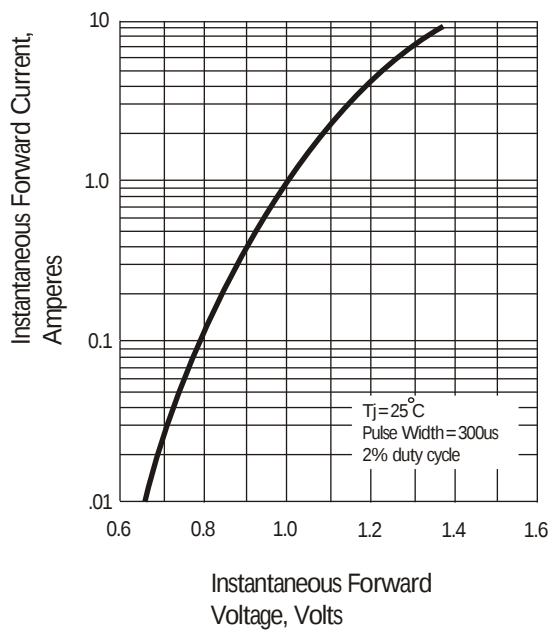


Fig. 4 Typical Revers Characteristics

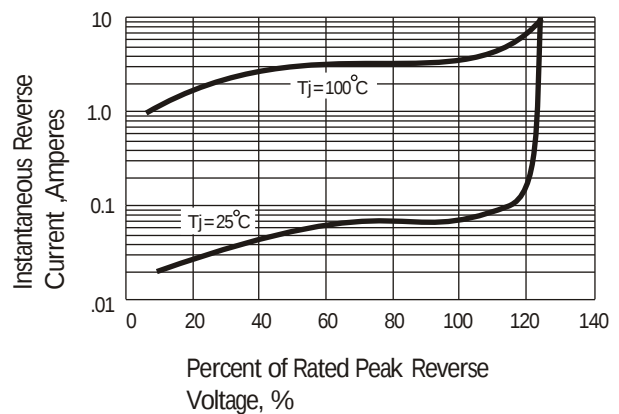


Fig. 5 Typical Junction Capacitance

