

**1.0 A Miniature Rectifier**  
Rectifier Reverse Voltage 200 to 1300V

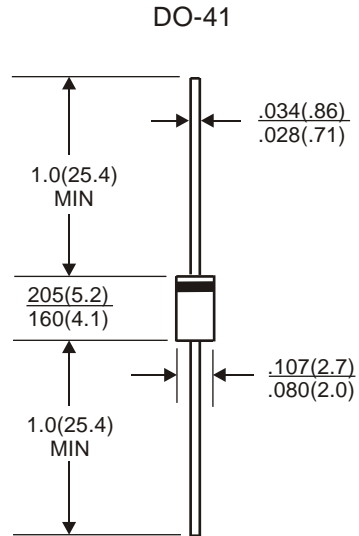


**Features**

- 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**

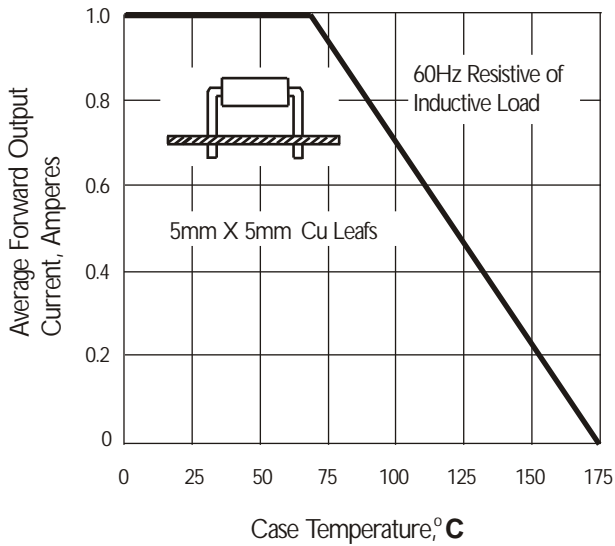
Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
 For Capacitive load derate by 20 %.

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

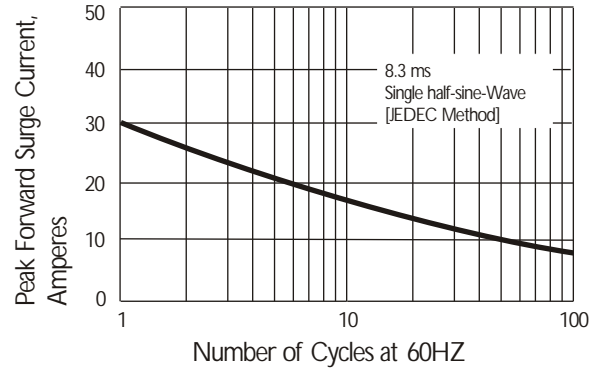
# Rating and Characteristic Curves ( $T_A=25^{\circ}\text{C}$ Unless otherwise noted )

## BY133 thru BY135

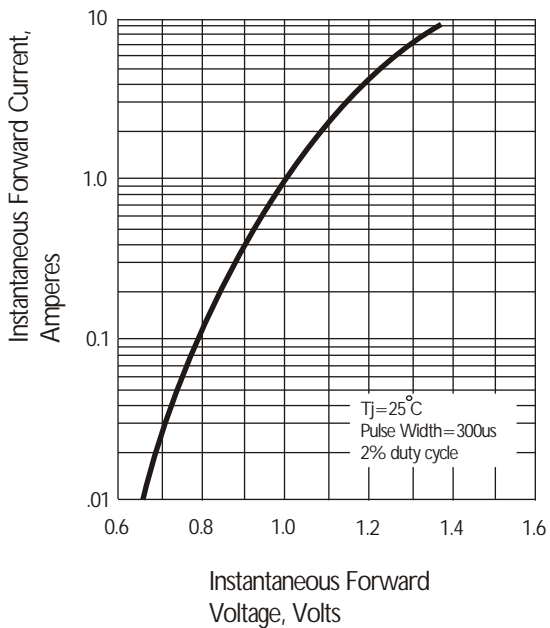
**Fig. 1 Derating Curve for Output Rectified Current**



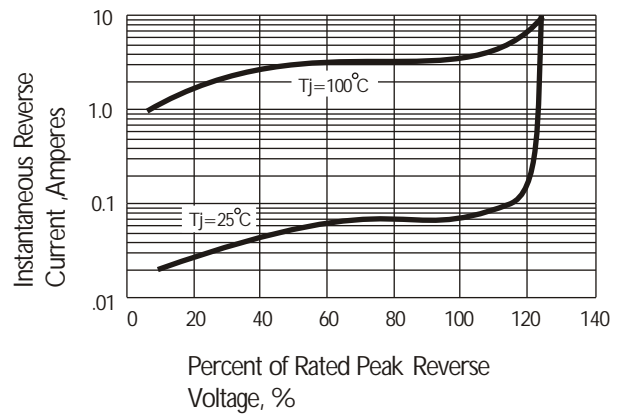
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Revers Characteristics**



**Fig. 5 Typical Junction Capacitance**

