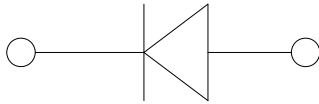
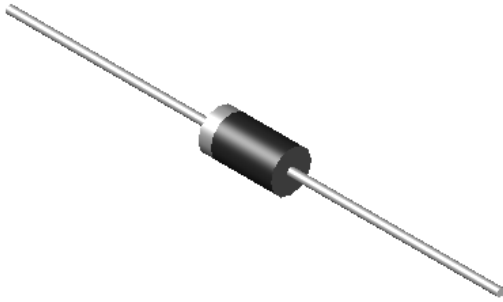


BY251 THRU BY255

General Purpose Rectifier

RoHS
COMPLIANT



Features

- High efficiency
- High current capability
- High reliability
- High surge current capability
- Low power loss
- Glass passivated chip junction
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer, and telecommunication.

Mechanical Data

- **Package:**DO-201AD(DO-27)
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:**Color band denotes cathode end

Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BY251	BY252	BY253	BY254	BY255
Device marking code							
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	200	400	600	800	1300
Maximum RMS Voltage	V _{RMS}	V	140	280	420	560	910
Maximum DC blocking Voltage	V _{DC}	V	200	400	600	800	1300
Average Forward Current @60Hz sine wave, Resistance load, Ta =70°C	I _{F(AV)}	A	3.0				
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, Tj=25°C	I _{FSM}	A	200				
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25°C			360				
Current squared time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	I ² t	A ² s	166				
Typical junction capacitance @Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	C _j	pF	40				31
Storage Temperature	T _{stg}	°C	-55 ~ +150				
Junction Temperature	T _j	°C	-55 ~ +150				

Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BY251	BY252	BY253	BY254	BY255
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =3.0A	1.0				
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C	2.5				
			T _j =125°C	100				

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■ **Thermal Characteristics** ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BY251	BY252	BY253	BY254	BY255	
Typical Thermal Resistance	$R_{\theta JA}$	$^{\circ}\text{C/W}$	30					

■ **Ordering Information (Example)**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BY251~BY255	D1	Approximate 1.05	1250	1250	12500	Tape
BY251~BY255	C1	Approximate 1.05	250	250	12500	Bulk

■ **Characteristics (Typical)**

FIG.1: I_o - T_a Curve

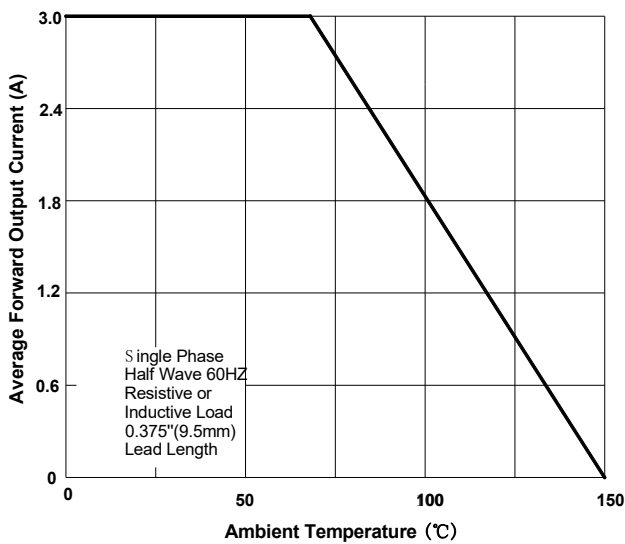


FIG.2: Forward Surge Current Capability

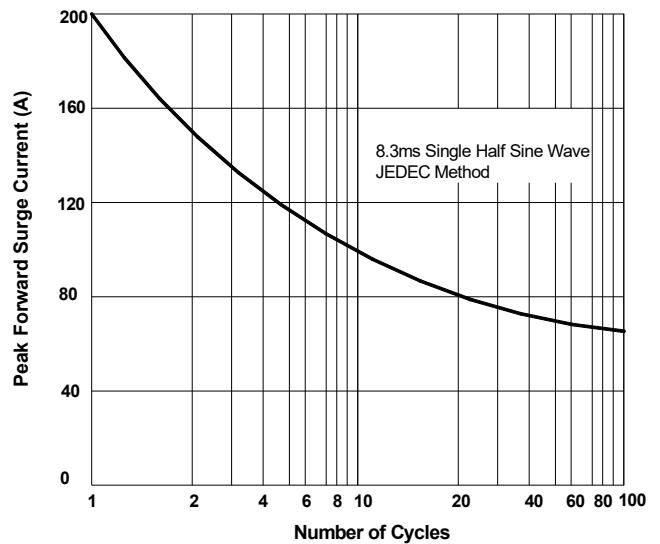


FIG.3: Forward Voltage

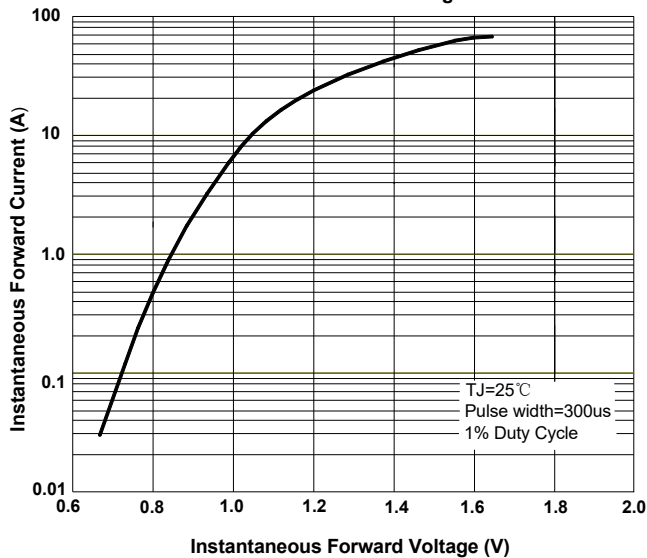
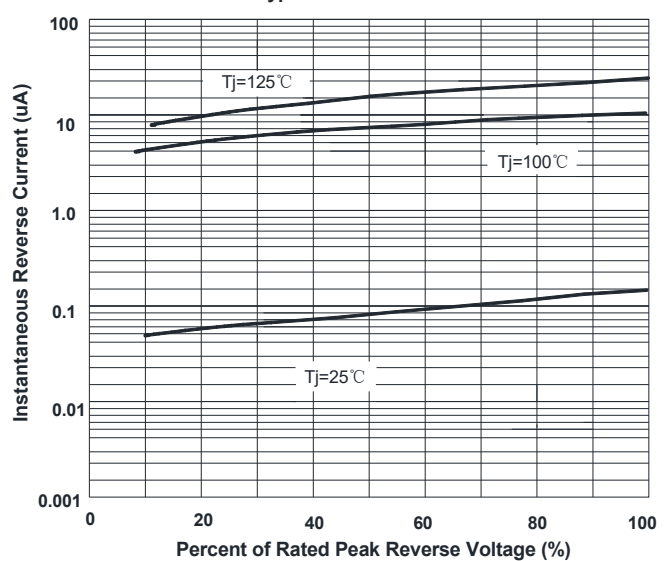
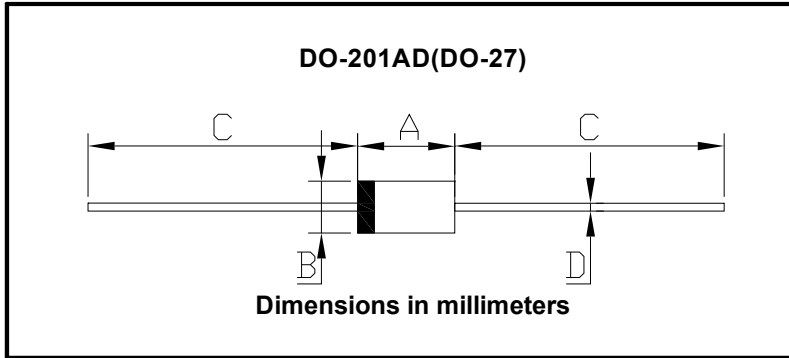


FIG.4: Typical Reverse Characteristics



■ Outline Dimensions

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DO-201AD(DO-27)		
Dim	Min	Max
A	8.50	9.50
B	5.00	5.60
C	25.4	/
D	1.20	1.30

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