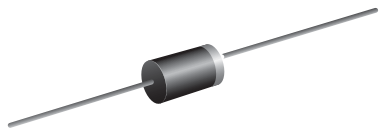
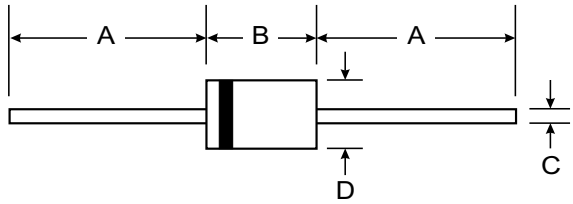
R4000 - R5000

HIGH VOLTAGE RECTIFIER DIODES

VOLTAGE RANGE: 4000 - 5000V
CURRENT: 200mA





DO-15		
Dim	**Min**	**Max**
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60
All Dimensions in mm		

Features

- High voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

Mechanical Data

- Case: DO-15,Molded Plastic
- Terminals: Plated Leads Solderable per
- MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.40 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

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	R4000	R5000	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	4000	5000	V
RMS Reverse Voltage	$V_{R(RMS)}$	2800	3500	V
Average Rectified Output Current (Note 1) @ T_L = 55	I_O	200		mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30		A
Forward Voltage @ I_F = 200mA	V_{FM}	5.0		V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	I_{RM}	5.0		μA
Typical Junction Capacitance (Note 2)	C_j	15		pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	50		K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +125		°C

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

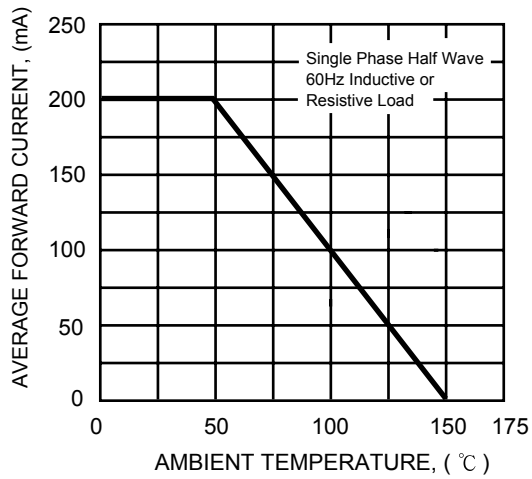


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

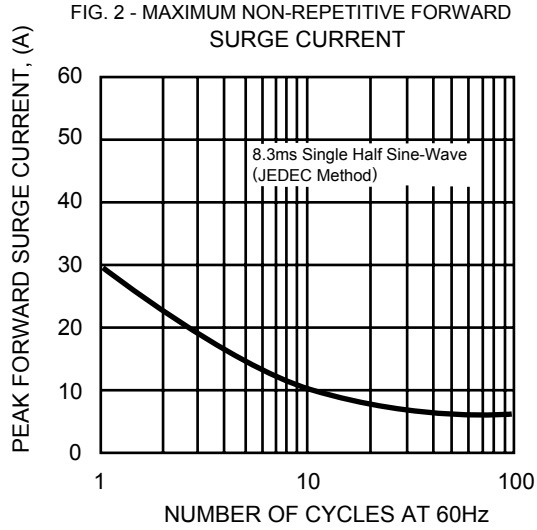


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

