



500 mA & 200 mA High Voltage Silicon Rectifier
Rectifier Reverse Voltage 1200 to 5000V

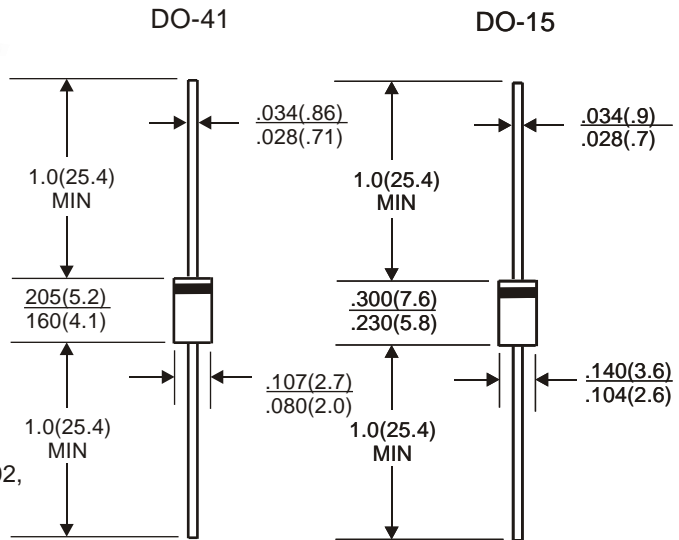


Features

- Avalanche operation
- Low Forward Voltage Drop
- 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: 0.3 grams (approx) for DO-41 package
 0.4 grams (approx) for DO-15 package



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	R1200	R1500	R1800	R2000	R2500	R3000	R4000	R5000	unit
Maximum repetitive peak reverse voltage	VRRM	1200	1500	1800	2000	2500	3000	4000	5000	V
Maximum RMS bridge input voltage	VRMS	840	1050	1260	1400	1750	2100	2800	3500	V
Maximum DC blocking voltage	VDC	1200	1500	1800	2000	2500	3000	4000	5000	V
Maximum average forward rectified output current at TA=55°C	IF(AV)	500				200				mA
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					9				pF
Operating junction and storage temperature range	TJ, TSTG					-55 to + 150				°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	R1200	R1500	R1800	R2000	R2500	R3000	R4000	R5000	Unit
Maximum instantaneous forward voltage drop per leg at IF DC	VF	2.0				4.5				V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =100°C	IR					5.0 50.0				µA

Rating and Characteristic Curves ($T_A=25^{\circ}\text{C}$ Unless otherwise noted) R1200 thru R5000

Fig. 1 Derating Curve for Output Rectified Current

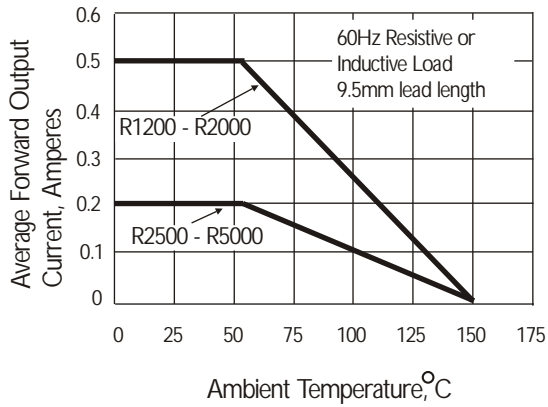


Fig. 2 Peak Forward Surge Current

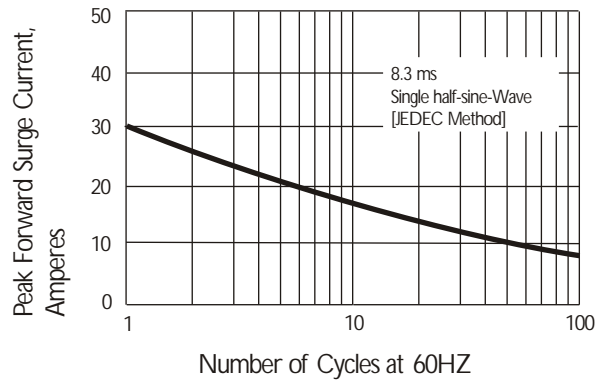


Fig. 3 Typical Instantaneous Forward Characteristics

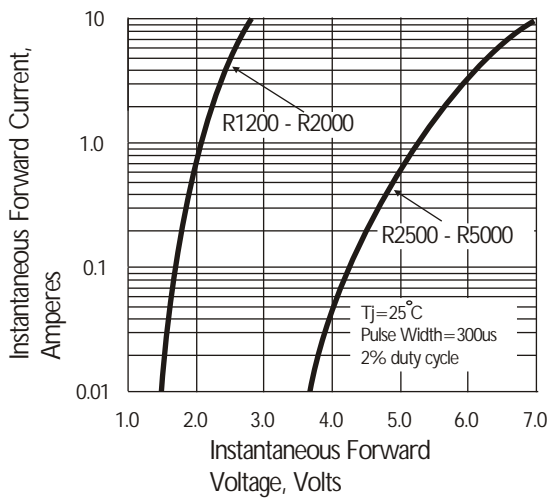


Fig. 4 Typical Reverse Characteristics

