

R2500 THRU R5000

High Voltage Silicon Rectifiers

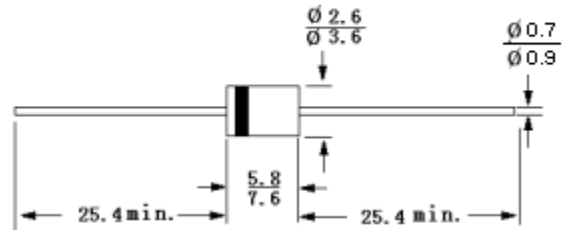
Reverse Voltage – 2500 to 5000 V

Forward Current – 0.2 A

Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability

D0-15



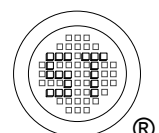
Dimensions in mm

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	R2500	R3000	R4000	R5000	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	2500	3000	4000	5000	V
Maximum RMS Voltage	V _{RMS}	1750	2100	2800	3500	V
Maximum DC Blocking Voltage	V _{DC}	2500	3000	4000	5000	V
Maximum Forward Voltage at 0.2 A	V _F	3.0	4.0	5.0		V
Maximum Average Forward Rectified Current at T _A = 50 °C	I _(AV)	200				mA
Peak Forward Surge Current 8.3 ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30				A
Maximum DC Reverse Current T _A = 25 °C at Rated DC Blocking Voltage T _A = 100 °C	I _R	5.0				μA
		100				
Maximum Full Load Reverse Current Average, Full Cycle 0.375"(9.5 mm) Lead Length at T _L = 75 °C		30				
Typical Junction Capacitance ¹⁾	C _J	30				pF
Operating and Storage Temperature Range	T _j , T _{stg}	- 55 to + 150				°C

¹⁾ Measured at 1 MHz and applied reverse voltage of 4 V



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FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

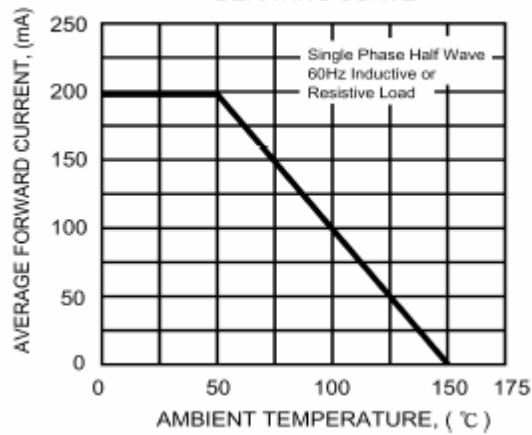


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

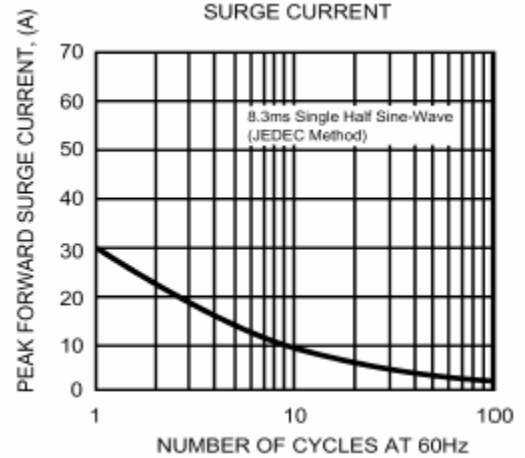


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

