

# S5688B/G/J/N

**PRV : 100 - 1000 Volts**  
**Io : 1.0 Ampere**

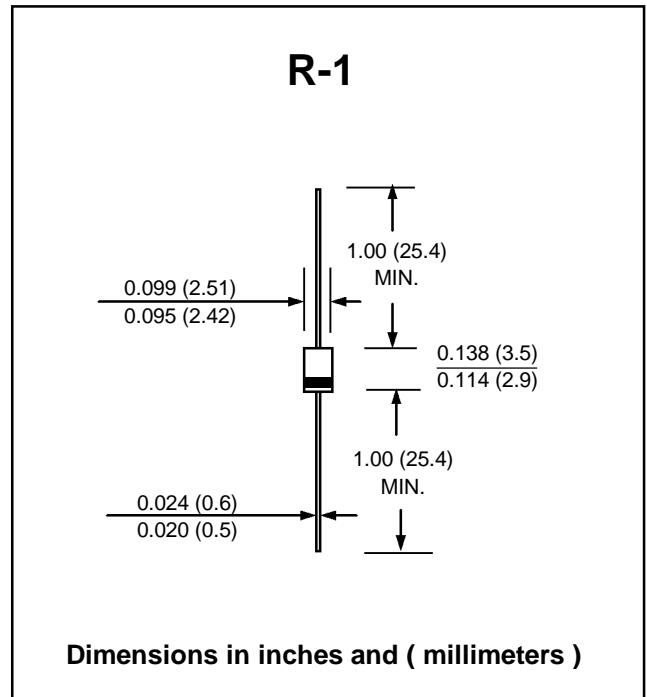
### FEATURES :

- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.20 gram

## SILICON RECTIFIER DIODES



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

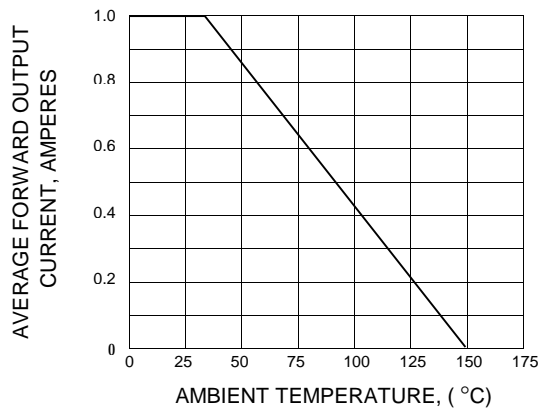
Single phase, half wave, 50 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

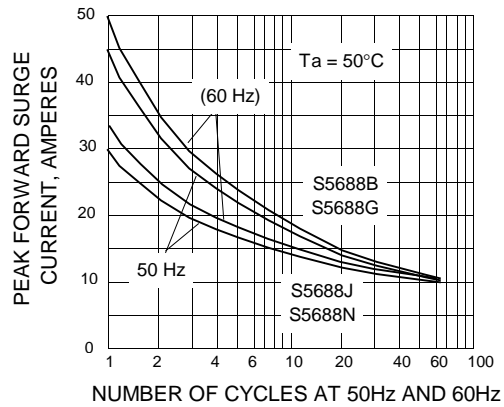
RATING	SYMBOL	S5688B	S5688G	S5688J	S5688N	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	400	600	1000	V
Maximum RMS voltage	$V_{RMS}$	70	280	420	700	V
Maximum DC Blocking Voltage	$V_{DC}$	100	400	600	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	1.0				A
Maximum Peak Forward Surge Current Single half sine wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	(50Hz) 45	(60Hz) 49	(50Hz) 30	(60Hz) 33	A
Maximum Forward Voltage drop per diode at $I_F = 1.0$ A	$V_F$	1.2				V
Repetitive Peak Reverse Current	$I_{RRM}$	10				$\mu A$
Junction Temperature Range	$T_J$	- 40 to + 150				$^{\circ}C$
Storage Temperature Range	$T_{STG}$	- 40 to + 150				$^{\circ}C$

### RATING AND CHARACTERISTIC CURVES (S5688B/G/J/N)

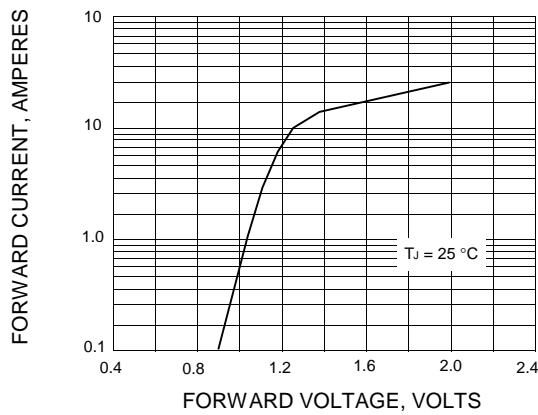
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

