Certificate Number: Q10561

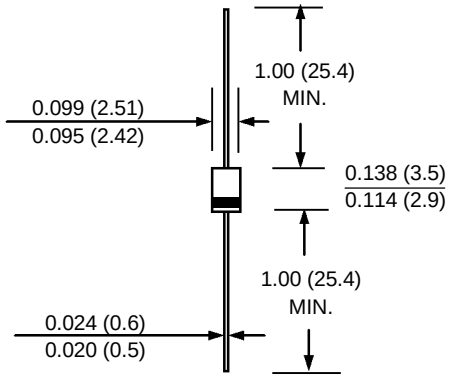
Certificate Number: E17276

S5688B/G/J/N

SILICON RECTIFIER DIODES

PRV : 100 - 1000 Volts
Io : 1.0 Ampere

R-1



Dimensions in inches and (millimeters)

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

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				µA
Junction Temperature Range	T_J	- 40 to + 150				°C
Storage Temperature Range	T_{STG}	- 40 to + 150				°C

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

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

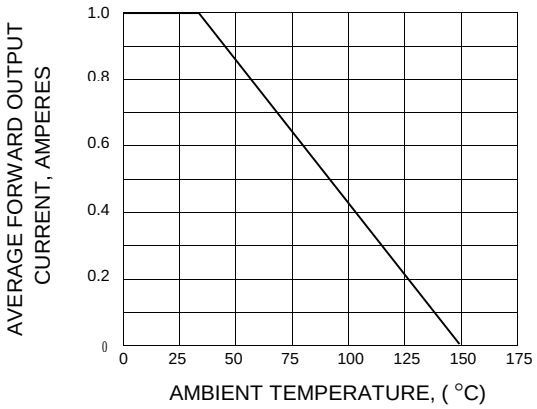


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

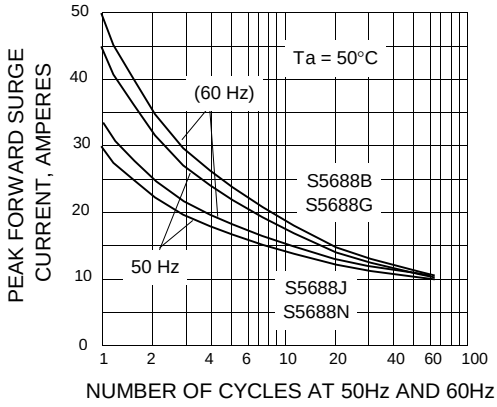


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

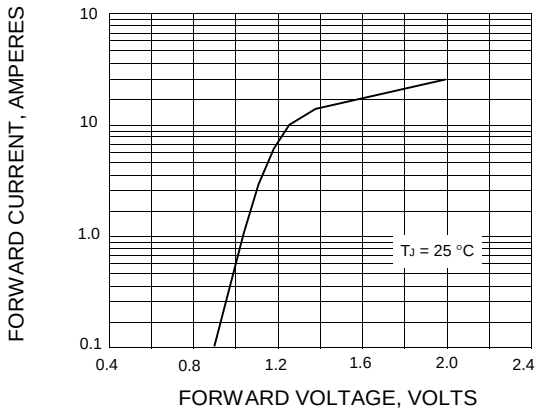


FIG.4 - TYPICAL REVERSE CHARACTERISTICS