

GP15A - GP15M

SILICON RECTIFIER DIODES

PRV : 50 - 1000 Volts

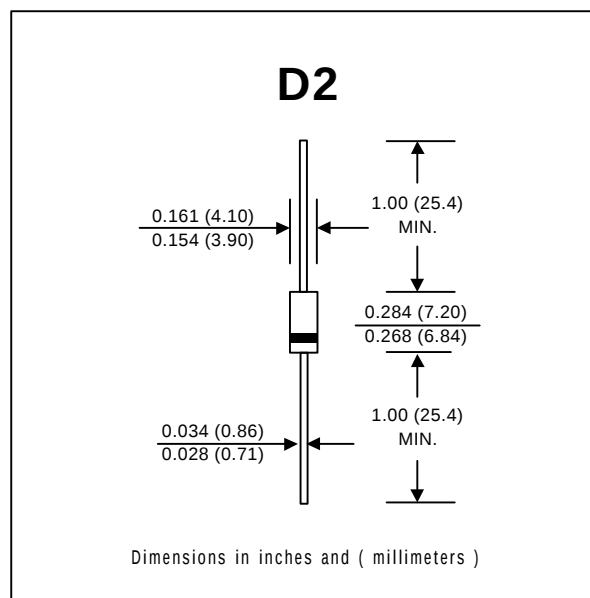
Io : 1.5 Amperes

FEATURES :

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

MECHANICAL DATA :

- * Case : D2 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 : 0.465 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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%.

RATING	SYMBOL	GP 15A	GP 15B	GP 15D	GP 15G	GP 15J	GP 15K	GP 15M	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 55 °C	IF(AV)	1.5							A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	IFSM	50							A
Maximum Peak Forward Voltage at IF = 1.5 A	VF	1.1							V
Maximum Full load Reverse Current, Full Cycle Average 0.375",(9.5mm) Lead Length Ta = 55°C	IR(AV)	100							µA
Maximum DC Reverse Current Ta = 25 °C	IR	5.0							µA
at Rated DC Blocking Voltage Ta = 150 °C	IR(H)	200							µA
Typical Reverse Recovery Time (Note 1)	Trr	2.0							µs
Typical Junction Capacitance (Note 2)	CJ	15							pf
Typical Thermal Resistance (Note 3)	RθJA	25							°C/W
Junction Temperature Range	TJ	- 65 to + 175							°C
Storage Temperature Range	TSTG	- 65 to + 175							°C

Notes :

(1) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

(3) Thermal Resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (GP15A - GP15M)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

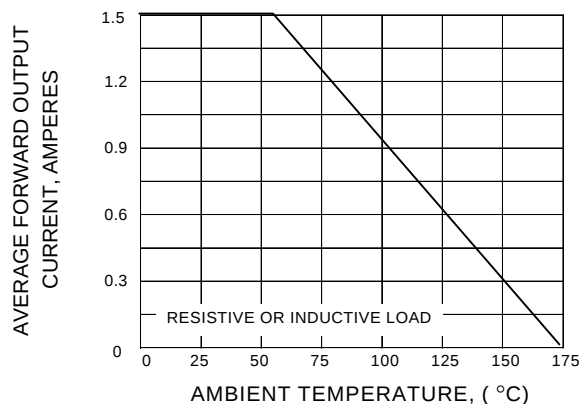


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

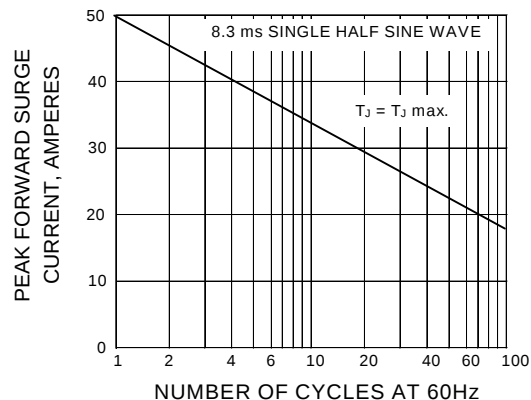


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

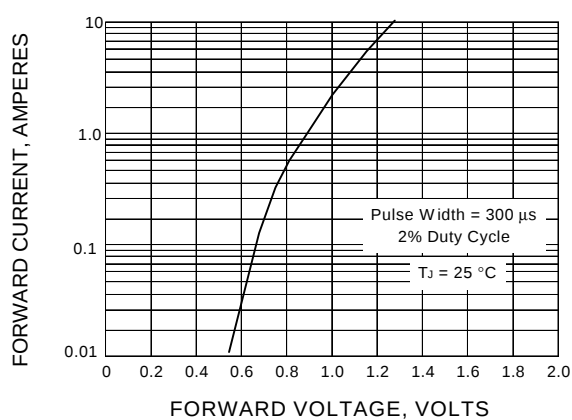


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

