Certificate Number: Q10561

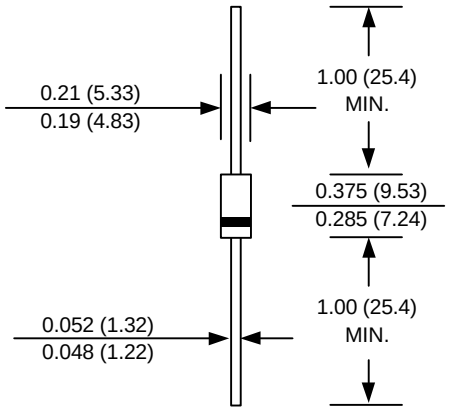
Certificate Number: E17276

1N5400 - 1N5408

SILICON RECTIFIER DIODES

PRV : 50 - 1000 Volts
Io : 3.0 Amperes

DO - 201AD



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 : DO-201AD 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 : 0.929 grams

Datasheet.Directory

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	1N5400	1N5401	1N5402	1N5404	1N5406	1N5407	1N5408	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 75 °C	I_F	3.0							A
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	200							A
Maximum Forward Voltage at I_F = 3.0 Amps.	V_F	0.95							V
Maximum DC Reverse Current Ta = 25 °C	I_R	5.0							µA
at rated DC Blocking Voltage Ta = 100 °C	$I_{R(H)}$	50							µA
Typical Junction Capacitance (Note1)	C_J	28							pF
Typical Thermal Resistance (Note2)	RθJA	15							°C/W
Junction Temperature Range	T_J	- 65 to + 175							°C
Storage Temperature Range	T_{STG}	- 65 to + 175							°C

Notes :

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V_{DC}

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

RATING AND CHARACTERISTIC CURVES (1N5400 - 1N5408)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

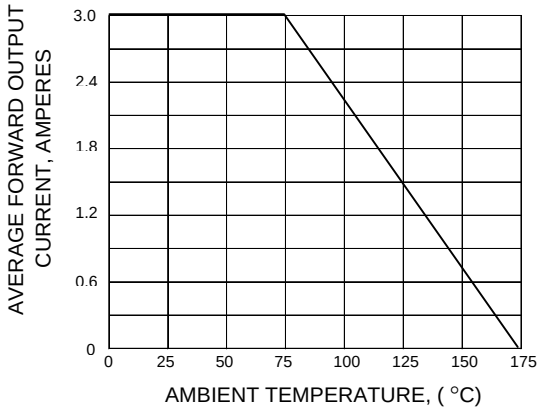


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

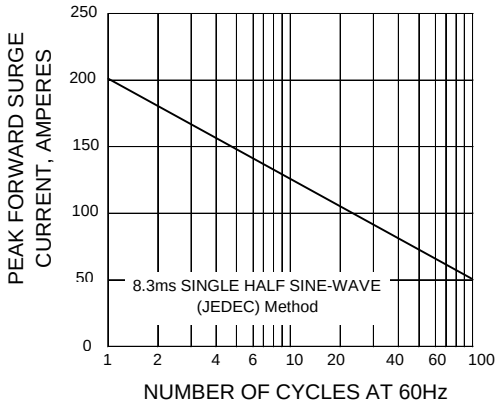


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

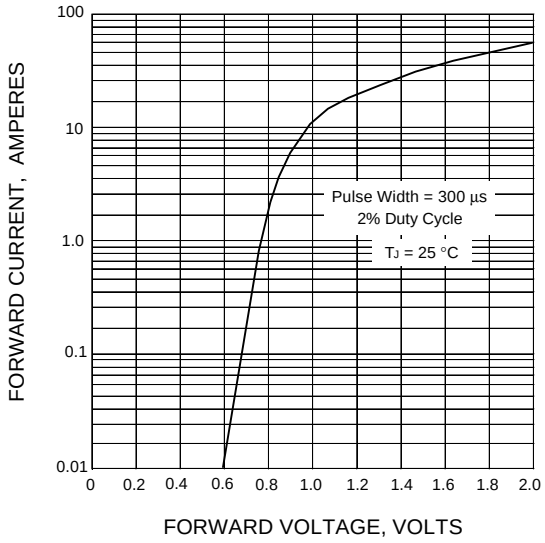


FIG 4 . - TYPICAL JUNCTION CAPACITANCE

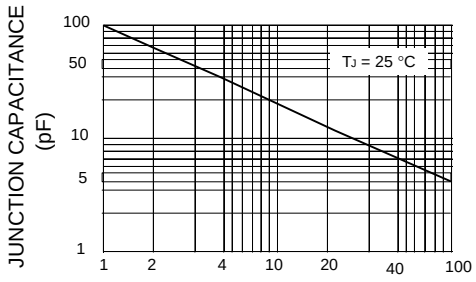
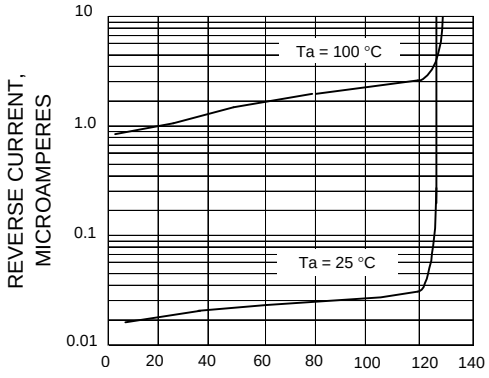



FIG. 5 - TYPICAL REVERSE CHARACTERISTICS