

1N4003ST

PRV : 200 Volts
Io : 1.0 Ampere

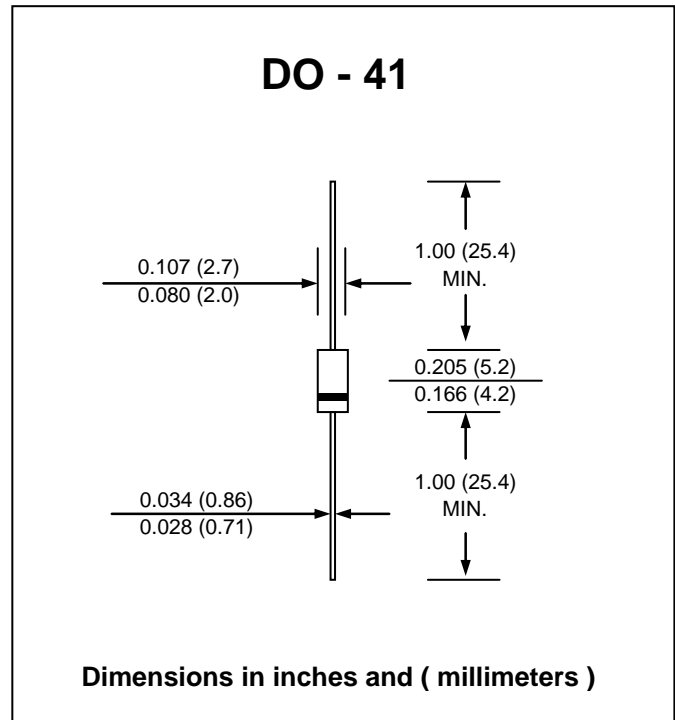
FEATURES :

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

MECHANICAL DATA :

- * Case : DO-41 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 : 0.34 gram

SILICON RECTIFIER DIODE



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	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	Volts
Maximum RMS Voltage	V _{RMS}	140	Volts
Maximum DC Blocking Voltage	V _{DC}	200	Volts
Maximum Average Forward Current 0.375"(9.5mm) Lead Length Ta = 75 °C	I _{F(AV)}	1.0	Amp.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I _{FSM}	30	Amps.
Maximum Forward Voltage at I _F = 1.0 Amp.	V _F	1.1	Volts
Maximum DC Reverse Current at rated DC Blocking Voltage	I _R	5.0	μA
Typical Junction Capacitance (Note1)	C _J	15	pF
Typical Thermal Resistance (Note2)	R _{θJA}	26	°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
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

RATING AND CHARACTERISTIC CURVES (1N4003ST)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

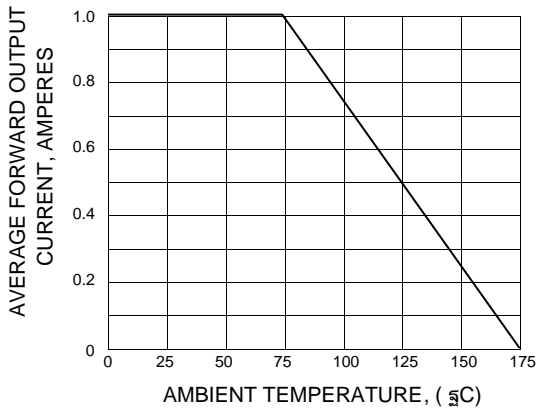


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

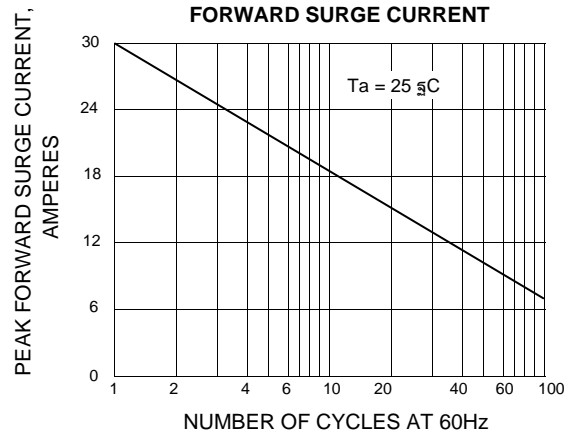


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

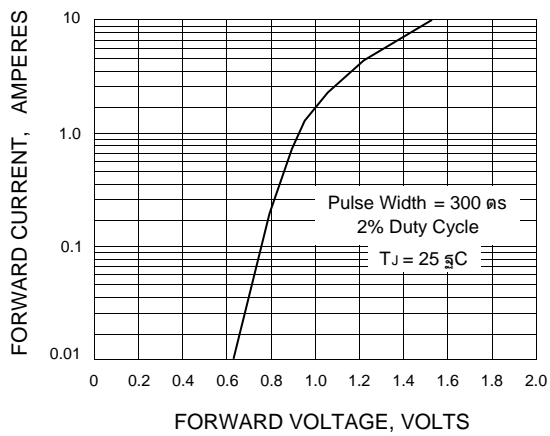


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

