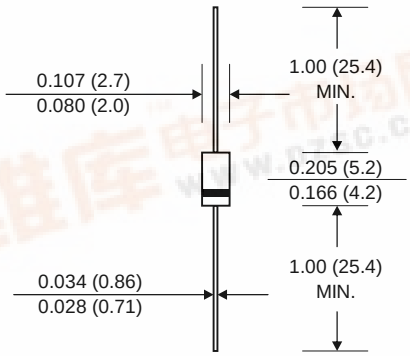
Certificate Number: Q10561
Certificate Number: E17276

1SR139-100 ~ 1SR139-600

SILICON RECTIFIER DIODES

PRV : 100 - 600 Volts
Io : 1.0 Ampere

DO - 41



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-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 : 0.339 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	1SR139-100	1SR139-200	1SR139-400	1SR139-600	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	V
Maximum Average Forward Current 0.375"(9.5mm) Lead Length	$I_{F(AV)}$	1.0				A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I_{FSM}	40				A
Maximum Forward Voltage at I_F = 1.0 A	V_F	1.1				V
Maximum DC Reverse Current at $V_R = V_{RRM}$	I_{RM}	10				µA
Junction Temperature Range	T_J	- 65 to + 175				°C
Storage Temperature Range	T_{STG}	- 65 to + 175				°C

RATING AND CHARACTERISTIC CURVES (1SR139-100 ~ 1SR139-600)

FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

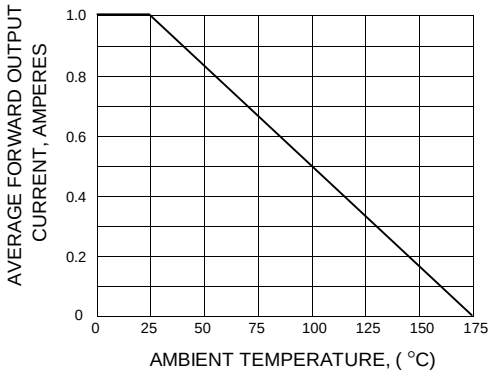


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

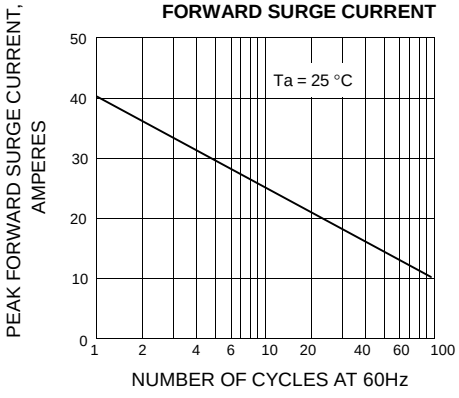


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

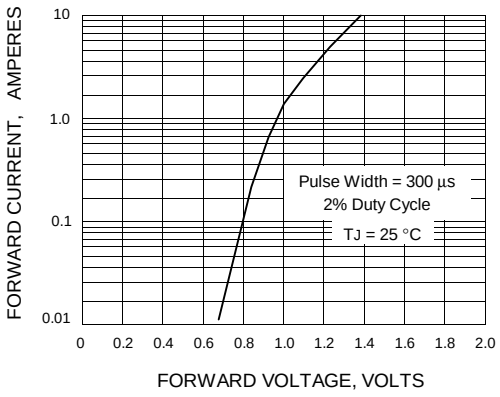


FIG.4 - TYPICAL REVERSE CHARACTERISTICS