SYNSEMI SEMICONDUCTOR

11DQ03 - 11DQ10

SCHOTTKY BARRIER RECTIFIER DIODES

PRV : 30 - 100 Volts
Io : 1.1 Ampere

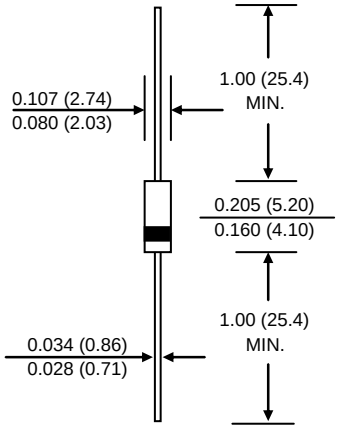
FEATURES :

* High current capability
* High surge current capability
* High reliability
* High efficiency
* Low power loss
* Low forward voltage drop
* Low cost
* 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

DO - 41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specifie.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

RATING	SYMBOL	11DQ03	11DQ04	11DQ05	11DQ06	11DQ09	11DQ10	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	30	40	50	60	90	100	V
Maximum RMS Voltage	V_{RMS}	21	28	35	42	63	70	V
Maximum DC Blocking Voltage	V_{DC}	30	40	50	60	90	100	V
Maximum Average Forward Current	$I_{F(AV)}$	1.1						A
	T_C	75		84		75		°C
Maximum Peak Forward Surge Current single half sine wave superimposed on rated load	I_{FSM}	42		26		42		A
Maximum Forward Voltage at I_F = 1 A, T_J = 25°C	V_F	0.55		0.58		0.85		V
at I_F = 2 A, T_J = 25°C		0.71		0.76		0.96		
Maximum Reverse Current at T_J = 25°C	I_R	1.0		1.0		0.5		mA
Rated DC Blocking Voltage T_J = 125°C	$I_{R(H)}$	6.0		11		1.0		
Junction Temperature Range	T_J	- 40 to + 150						°C
Storage Temperature Range	T_{STG}	- 40 to + 150						°C

RATING AND CHARACTERISTIC CURVES (11DQ03 - 11DQ10)

FIG.1 - FORWARD CURRENT DERATING CURVE

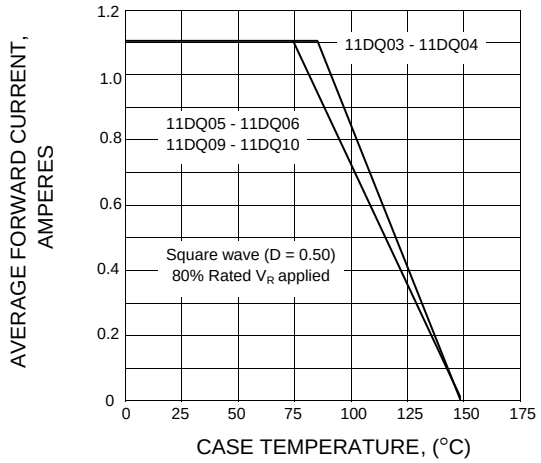


FIG.2 - MAXIMUM FORWARD SURGE CURRENT

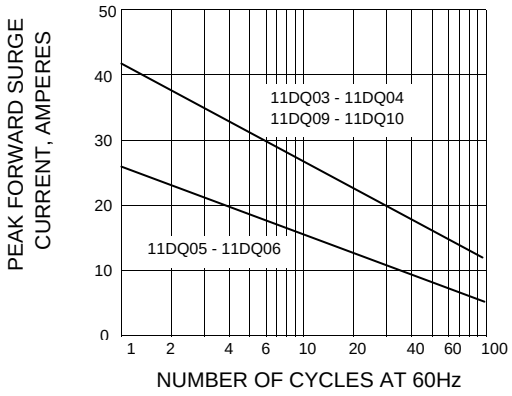


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

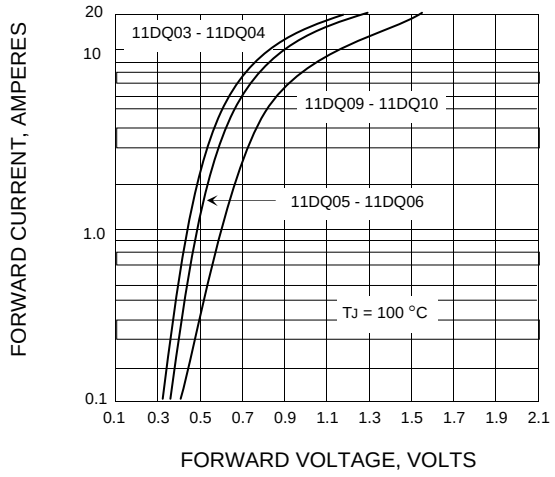


FIG.4 - TYPICAL REVERSE CHARACTERISTICS