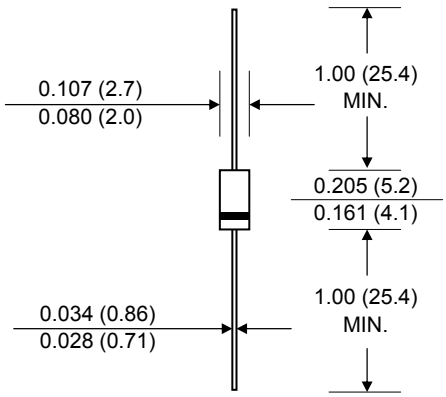
21DQ09

SCHOTTKY BARRIER DIODE

PRV : 90 Volts
Io : 1.7 Ampere

DO - 41



Dimensions in inches and (millimeters)

FEATURES :

* High surge capability
* High efficiency
* Low power loss
* 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 : 0.335 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	90	V
Maximum Average Forward Current , Ta = 32 °C	$I_{F(AV)}$	1.3 (1)	A
Half Sine wave Resistive Load Ta = 47 °C		1.7 (2)	
RMS Forward Current	$I_{F(RMS)}$	2.7	A
Maximum Surge Forward Current, Half sine wave, 1 cycle, Non-Repetitive	I_{FSM}	70	A
Maximum Forward Voltage at I_F = 2.0 A, T_J = 25 °C	V_F	0.85	V
Maximum Reverse Current , $V_R = V_{RRM}$, T_J = 25 °C	I_{RM}	1.0	mA
Maximum Thermal Resistance	$R_{\Theta JA}$	105 (1)	°C/W
		70 (2)	
Operating Junction Temperature Range	T_J	- 40 to + 150	°C
Storage Temperature Range	T_{STG}	- 40 to + 150	°C

Notes :

(1) Without Fin or P.C. Board.

(2) P.C. Board mounted (Print Land = 5 × 5 mm, Both Sides).

RATING AND CHARACTERISTIC CURVES (21DQ09)

FIG.1 - AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

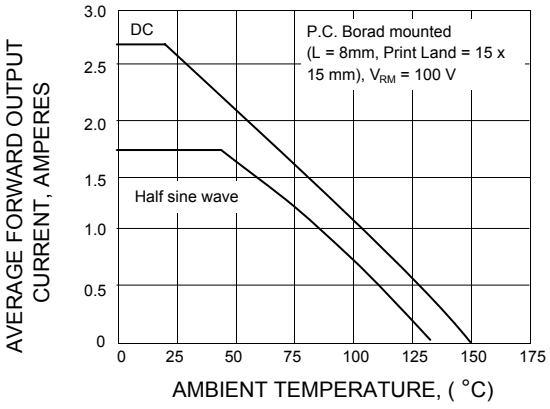


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

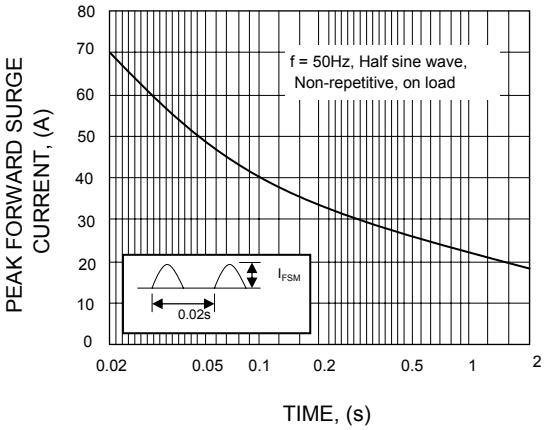


FIG. 3 - FORWARD CURRENT VS. FOREARD VOLTAGE

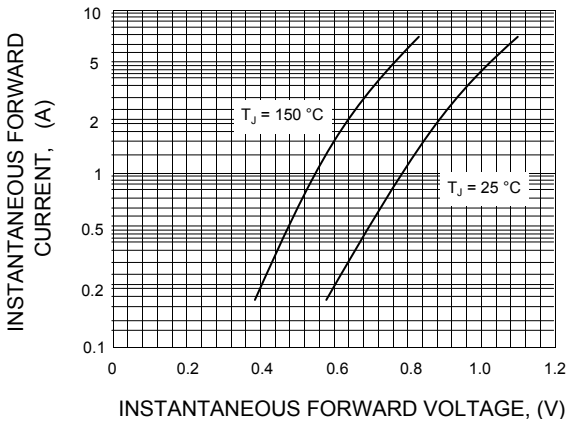


FIG. 4 – JUNCTION CAPACITANCE VS. REVERSE VOLTAGE