

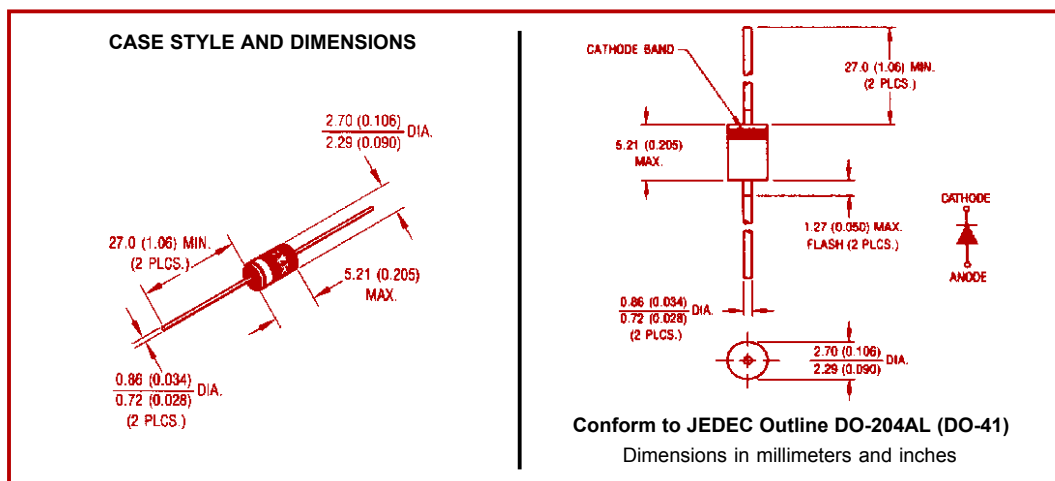
Major Ratings and Characteristics

Characteristics	Values	Units
$I_{F(AV)}$ Rectangular waveform	2	A
V_{RRM}	40	V
V_F @2Apk, $T_J = 125^\circ\text{C}$	0.5	V
T_J range	-40 to 150	$^\circ\text{C}$

Description/Features

The 21DQ04 axial leaded Schottky rectifier has been optimized for very low forward voltage drop, with moderate leakage. Typical applications are in switching power supplies, converters, free-wheeling diodes, and reverse battery protection.

- Low profile, axial leaded outline
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Very low forward voltage drop
- High frequency operation
- Guard ring for enhanced ruggedness and long term reliability
- Lead-Free plating



21DQ04

Bulletin PD-20707 rev. D 11/04

International
IR Rectifier

Voltage Ratings

Part number	21DQ04
V_R Max. DC Reverse Voltage (V)	40
V_{RWM} Max. Working Peak Reverse Voltage (V)	

V_{FM} Max. Forward Voltage Drop		0.49	0.55	V	@ 2A
	(1)	0.60	0.65	V	@ 4A
		0.42	0.5	V	@ 2A
		0.56	0.62	V	@ 4A
I_{RM} Max. Reverse Leakage Current					

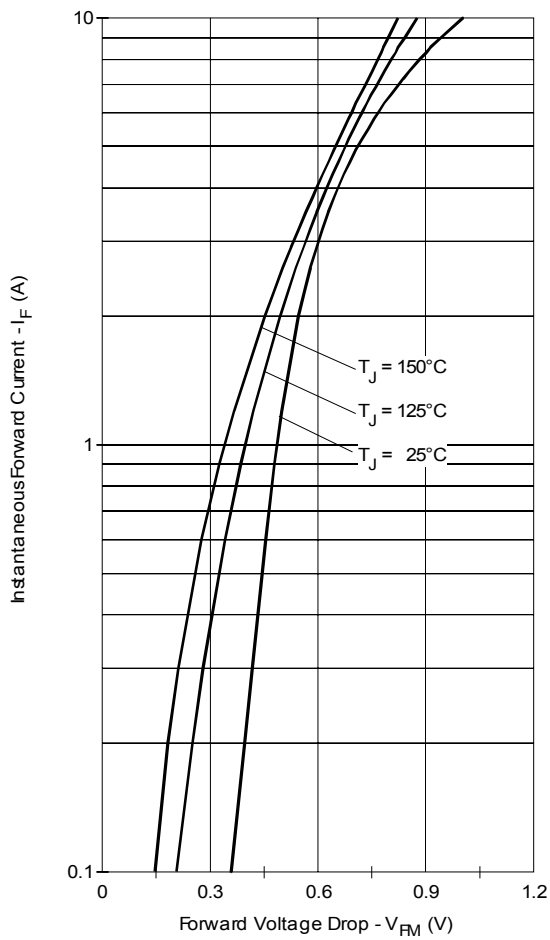


Fig. 1 - Maximum Forward Voltage Drop Characteristics

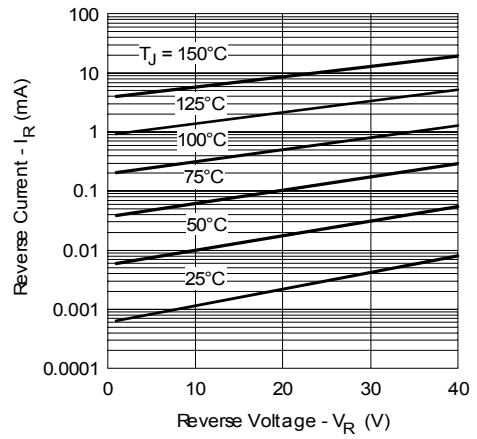


Fig. 2 - Typical Values of Reverse Current Vs. Reverse Voltage

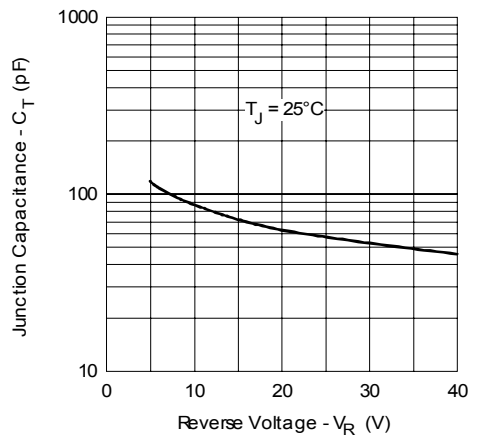


Fig. 3 - Typical Junction Capacitance Vs. Reverse Voltage

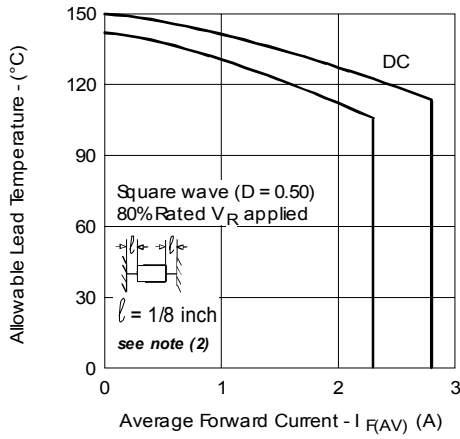


Fig. 4 - Maximum Allowable Lead Temperature Vs. Average Forward Current

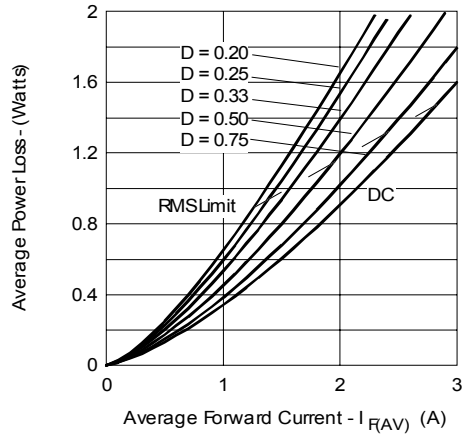


Fig. 5 - Forward Power Loss Characteristics

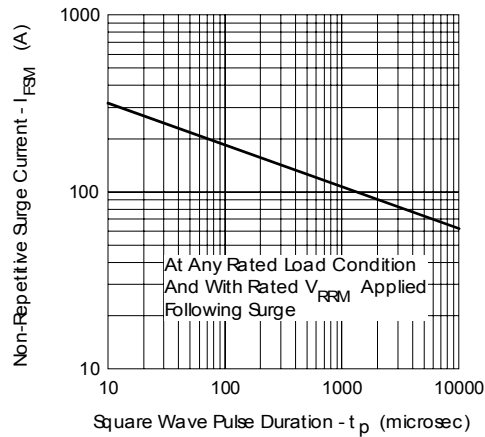


Fig. 6 - Maximum Non-Repetitive Surge Current

- (2) Formula used: $T_L = T_J - (Pd + Pd_{REV}) \times R_{thJL}$;
 $Pd = \text{Forward Power Loss} = I_{F(AV)} \times V_{FM} @ (I_{F(AV)} / D)$ (see Fig. 5);
 $Pd_{REV} = \text{Inverse Power Loss} = V_{R1} \times I_R (1 - D)$; $I_R @ V_{R1} = 80\% \text{ rated } V_R$

Ordering Information Table

Device Code											
	<table><tr><td>21</td><td>D</td><td>Q</td><td>04</td><td>TR</td></tr><tr><td>①</td><td>②</td><td>③</td><td>④</td><td>⑤</td></tr></table>	21	D	Q	04	TR	①	②	③	④	⑤
21	D	Q	04	TR							
①	②	③	④	⑤							
1	- 21 = 2.1A (Axial and small packages - Current is x10)										
2	- D = DO-41 package										
3	- Q = Schottky Q.. Series										
4	- 04 = Voltage Rating : 40V										
5	- TR = Tape & Reel package (5000 pcs) TB = Tape & Box package (Ammunition -3000 pcs) - = Box package (1000 pcs)										

Data and specifications subject to change without notice.
This product has been designed and qualified for Industrial Level and Lead-Free.
Qualification Standards can be found on IR's Web site.

International
IR Rectifier

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11/04



Notice

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