



**DESCRIPTION**

The D1NK60 is available in DO-41 package.

**FEATURE**

- Low cost
- Diffused junction
- Low forward voltage drop
- High current capability

**Mechanical Data**

- Case: Molded plastic, DO-41
- Lead: Axial leads, solder able per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any

**PIN DESCRIPTION**



**ORDERING INFORMATION**

Package Type	Part Number
DO-41	D1NK60
Note	SPQ: 3,000pcs/Box
AiT provides all RoHS Compliant Products	

Symbol	Description
K	Cathode
A	Anode



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half-wave, 50 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

Parameter	Symbol	Conditions	Min	Typ.	Max	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	-	-	600	-	V
Maximum RMS Voltage	$V_{RMS}$	-	-	420	-	V
Maximum DC Blocking Voltage	$V_{DC}$	-	-	600	-	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	-	-	1	-	A
Peak Forward Surge Current 10 ms Single Half Sine Wave Superimposed on Rated Load at $T_J = 125^\circ\text{C}$	$I_{FSM}$	-	-	30	-	A
Maximum Forward Voltage at 1 A	$V_F$	$T_J = 25^\circ\text{C}$	-	2.5	-	V
		$T_J = 175^\circ\text{C}$	-	1.3	-	
Maximum Reverse Current at Rated DC Blocking Voltage	$I_R$	$T_A = 25^\circ\text{C}$	-	5	-	$\mu\text{A}$
		$T_A = 100^\circ\text{C}$	-	150	-	
Maximum Reverse Recovery Time <sup>(1)</sup>	$t_{rr}$	-	-	30	-	ns
Typical Junction Capacitance <sup>(2)</sup>	$C_J$	-	-	45	-	pF
Typical Thermal Resistance <sup>(3)</sup>	$R_{\theta JA}$	-	-	100	-	$^\circ\text{C/W}$
Operating Junction temperature range	$T_J$	-	-55	-	150	$^\circ\text{C}$
Storage temperature range	$T_{stg}$	-	-55	-	150	$^\circ\text{C}$

(1) Reverse recovery test conditions:  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

(2) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(3) Thermal resistance from junction to ambient.



## TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Forward Derating Curve

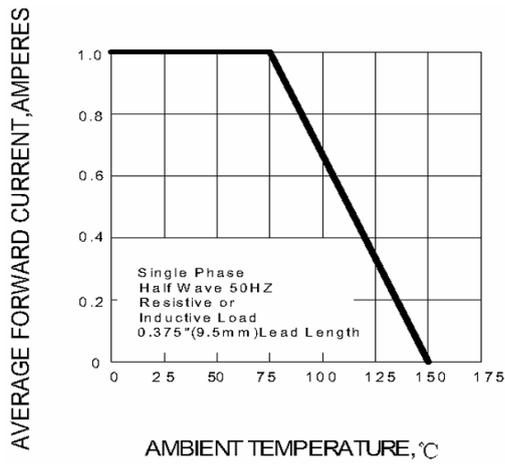


Fig 2. Typical Forward Characteristic

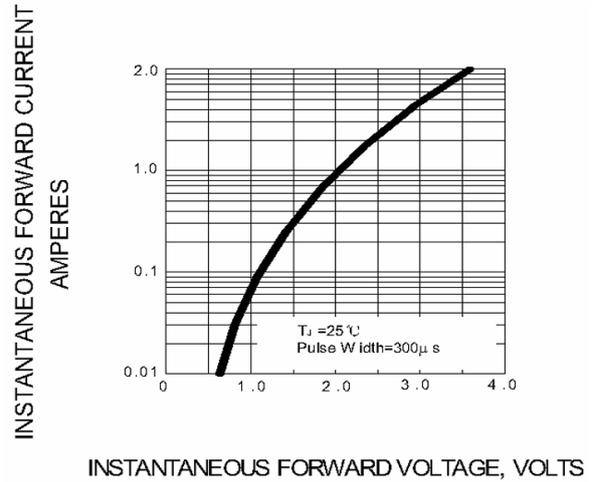


Fig 3. Peak Forward Surge Current

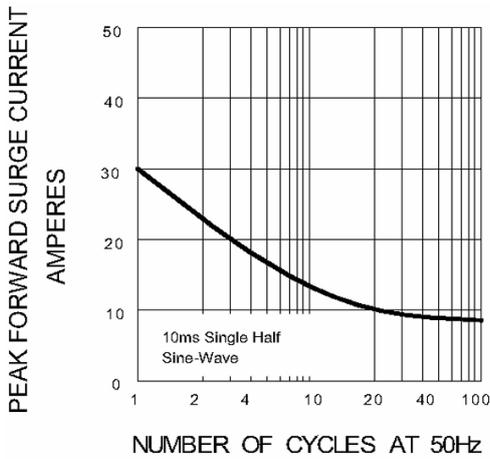
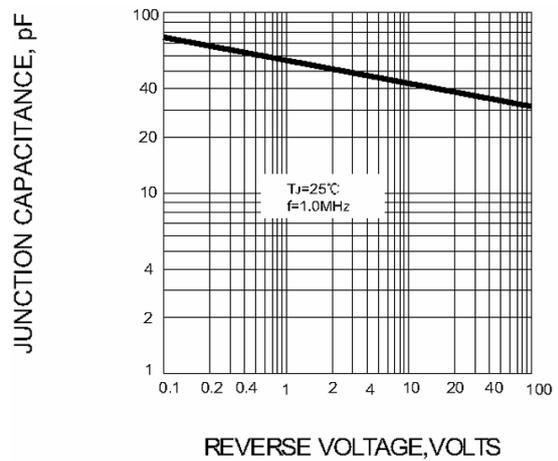


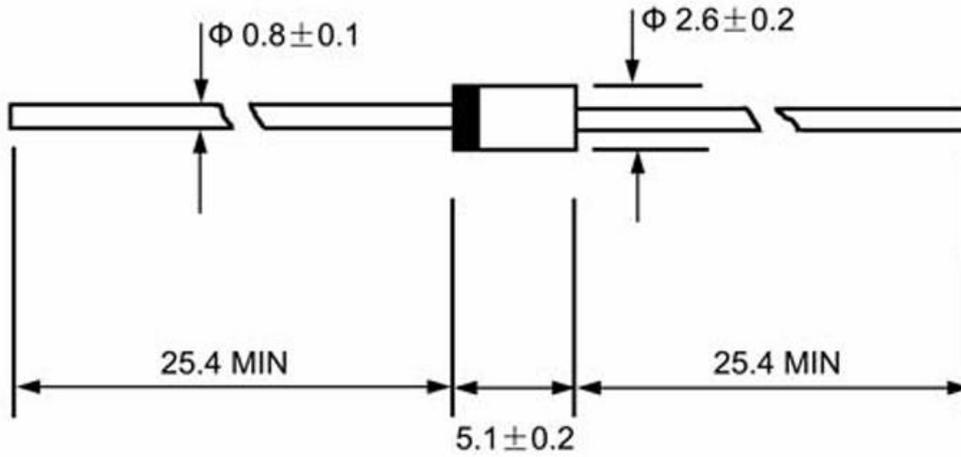
Fig 4. Typical Junction Capacitance





## PACKAGE INFORMATION

Dimension in DO-41 Package (Unit: mm)





## **IMPORTANT NOTICE**

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