DESCRIPTION

The D1N60 is available in DO-41 package.

FEATURE

- Low coat construction
- Low forward voltage drops
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds/.375" (9.5mm) lead length at 5 lbs (2.3kg) tension

Mechanical Data

- Case: Transfer molded plastic
- Epoxy: UL94V-O rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012 ounce, 0.33 grams

PIN DESCRIPTION

Symbol	Description
K	Cathode
A	Anode

ORDERING INFORMATION

Package Type	Part Number
DO-41	D1N60
Note	SPQ: 5,000pcs/Box
AiT provides all RoHS Compliant Products	

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 TA = 25℃	$I_{(AV)}$	-	-	1	-	A
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	I_{FSM}	-	-	30	-	A
Maximum Forward Voltage at 1 A	V_F	-	-	1.1	-	V
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	I_R	TA = 25℃	-	5	-	μA
		TA = 100℃	-	50	-	
Maximum Reverse Recovery Time (1)	t_{rr}	-	-	30	-	ns
Typical Junction Capacitance 2)	C_J	-	-	13	-	pF
Typical Thermal Resistance (3)	$R_{\theta JA}$	-	-	50	-	℃/W
Operating Junction temperature range	T_j	-	-55	-	150	℃
Storage temperature range	T_{stg}	-	-55	-	150	℃

(1) Measured at 1.0MHz and Applied Reverse Voltage of 4.0V DC.
(2) Thermal Resistance from junction to terminal 6.0mm2 copper pads to each terminal.
(3) The chip size is 40mil×40mil

TYPICAL PERFORMANCE CHARACTERISTICS

Fig 1. Typical Forward Current Derating Curve

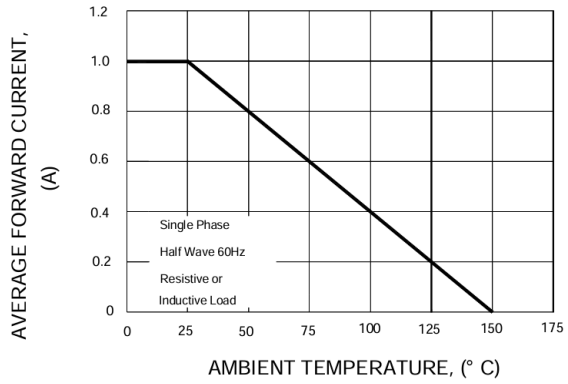


Fig 2. Maximum Non-Repetitive Peak Forward Surge Current

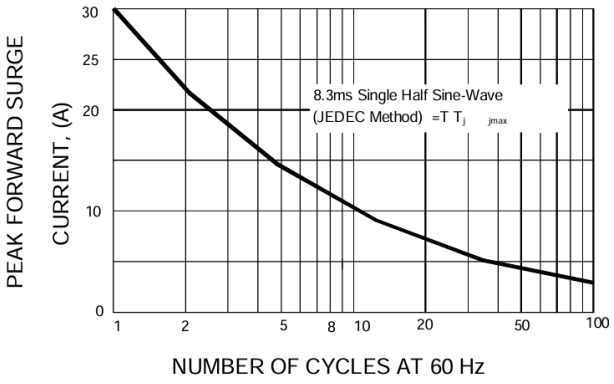


Fig 3. Typical Junction Capacitance

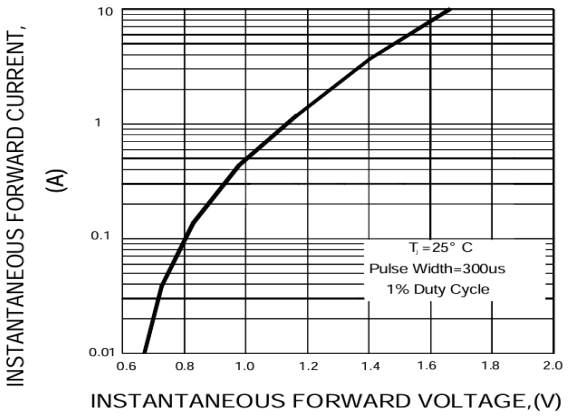


Fig 4. Typical Reverse Characteristics

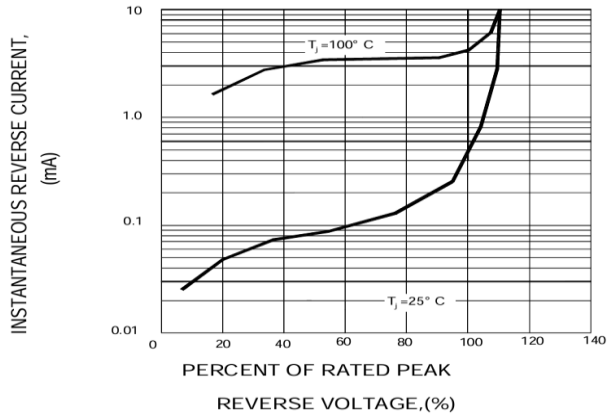
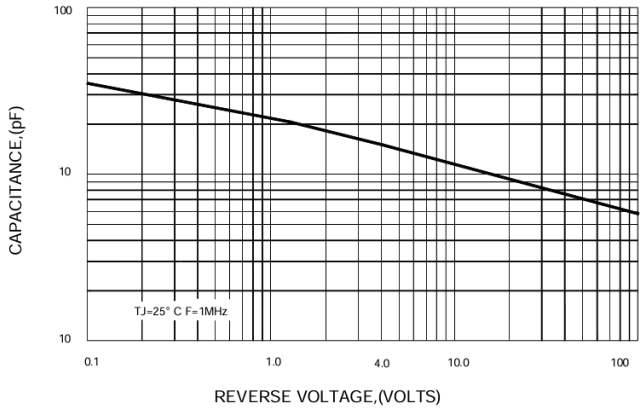
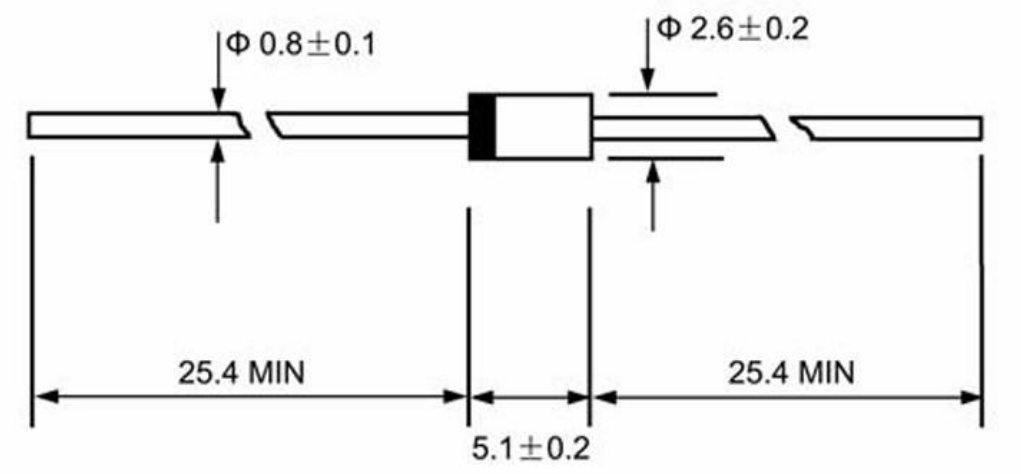


Fig 5. Typical Junction Capacitance



PACKAGE INFORMATION

Dimension in DO-41 Package (Unit: mm)



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