

1 AMP FAST RECOVERY SILICON DIODES

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capacity
- Fast switching for high efficiency

MECHANICAL DATA

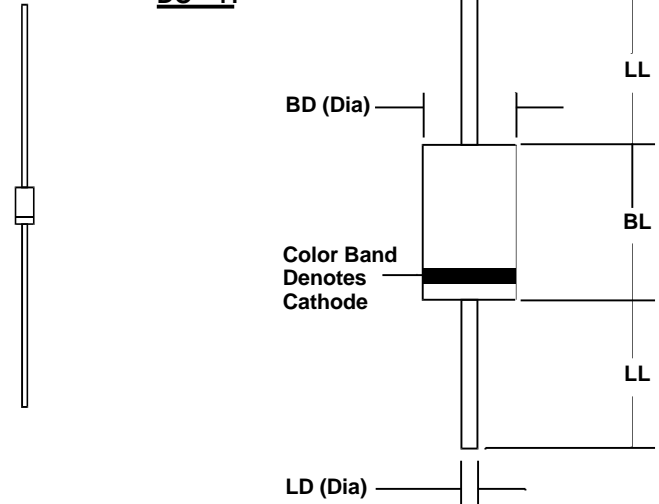
- Case: JEDEC DO-41, molded plastic (U/L Flammability Rating 94V-0)
- Terminals: Plated axial leads
- Soldering: Per MIL-STD 202 Method 208 guaranteed
- Polarity: Color band denotes cathode
- Mounting Position: Any
- Weight: 0.012 Ounces (0.34 Grams)

MECHANICAL SPECIFICATION

ACTUAL SIZE OF
DO-41 PACKAGE

SERIES 1N4933 - 1N4937

DO - 41



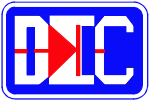
Sym	Minimum		Maximum	
	In	mm	In	mm
BL	0.160	4.1	0.205	5.2
BD	0.103	2.6	0.107	2.7
LL	1.00	25.4		
LD	0.028	0.71	0.034	0.86

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

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

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS					UNITS
		1N4933	1N4934	1N4935	1N4936	1N4937	
Series Number		1N4933	1N4934	1N4935	1N4936	1N4937	
Maximum DC Blocking Voltage	V _{RM}	50	100	200	400	600	VOLTS
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	
Maximum Peak Recurrent Reverse Voltage	V _{RRM}	50	100	200	400	600	
Average Forward Rectified Current @ T _A = 75 °C, Lead length = 0.375 in. (9.5 mm)	I _O	1					AMPS
Peak Forward Surge Current (8.3 mSec single half sine wave superimposed on rated load)	I _{FSM}	30					
Maximum Forward Voltage at 1 Amp DC	V _{FM}	1.2					VOLTS
Maximum Reverse Recovery Time (I _F =1A, V _R =30V - See Fig. 5)	T _{RR}	200					nS
Maximum Average DC Reverse Current @ T _A = 25 °C At Rated DC Blocking Voltage @ T _A = 100 °C	I _{RM}	5 100					μA
Typical Thermal Resistance, Junction to Ambient (Note 1)	R _{θJA}	41					°C/W
Typical Junction Capacitance (Note 2)	C _J	15					pF
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +175					°C

NOTES: (1) Thermal resistance from junction to ambient with diode mounted on PC Board and lead lengths = 0.375 in. (9.5 mm)
 (2) Measured at 1MHz & applied reverse voltage of 4 volts



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RATING & CHARACTERISTIC CURVES FOR SERIES 1N4933 - 1N4937

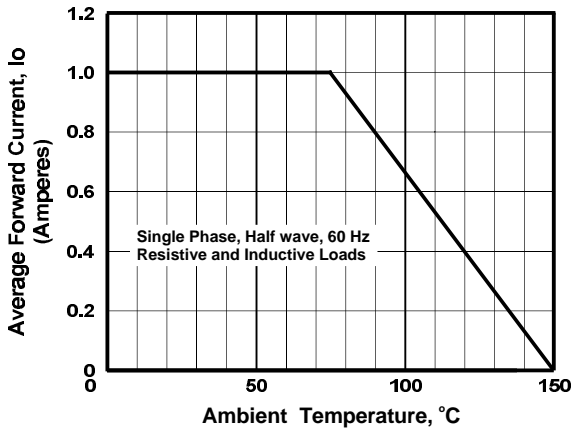


FIGURE 1. FORWARD CURRENT DERATING CURVE

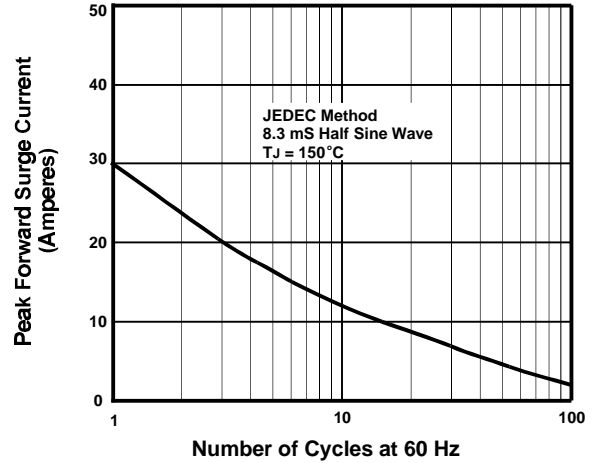


FIGURE 2. MAXIMUM NON-REPETITIVE SURGE CURRENT

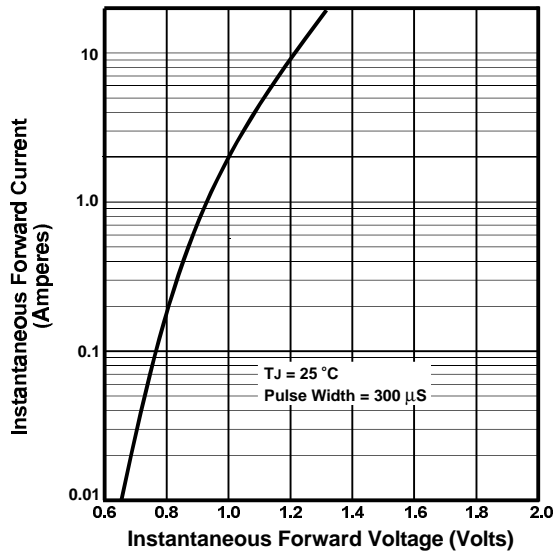


FIGURE 3. TYPICAL FORWARD CHARACTERISTIC PER DIODE

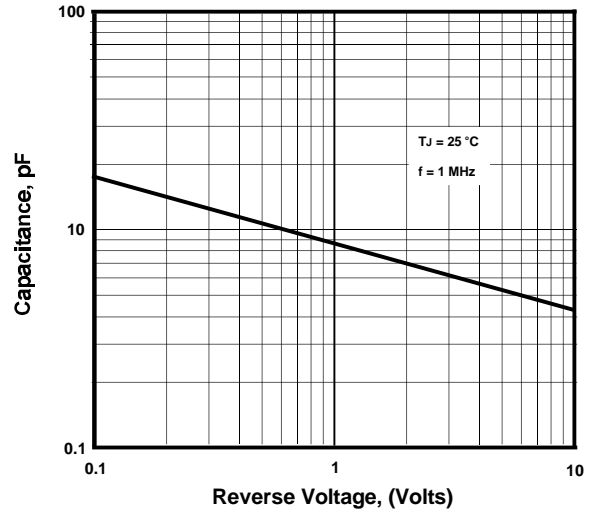


FIGURE 4. TYPICAL JUNCTION CAPACITANCE PER DIODE

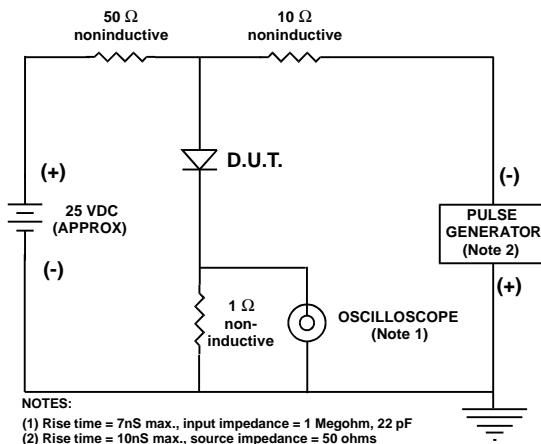


FIGURE 5. REVERSE RECOVERY TEST SETUP AND TIME CHARACTERISTIC