



Micro Commercial Components
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1N4005-TS01

Features

- General Purpose Plastic Rectifier
- Low reverse leakage
- High surge current capability

1.0 Amp Rectifier 600 Volts

Maximum Ratings

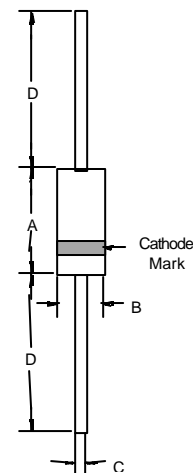
- Operating Temperature: -55°C to +125°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance; 25°C/W Junction To Lead
50°C/W Junction To Ambient

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
1N4005-TS01	600V	420V	600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Current	$I_{F(AV)}$	1.0A	$T_A = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	50A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM} = 1.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	1.0 μA 50 μA	$T_J = 25^\circ\text{C}$ $T_J = 100^\circ\text{C}$
Typical Reverse Recovery Time	trr	2.0 μs	$I_F=0.5\text{A}, I_R=1.0\text{A}$ $I_{rr}=0.25\text{A}$
Typical Junction Capacitance	C_J	15pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

DO-41



DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	
C	.028	.034	.70	.90	
D	1.000	---	25.40	---	

1N4005-TS01



FIG. 1 - FORWARD CURRENT DERATING CURVE

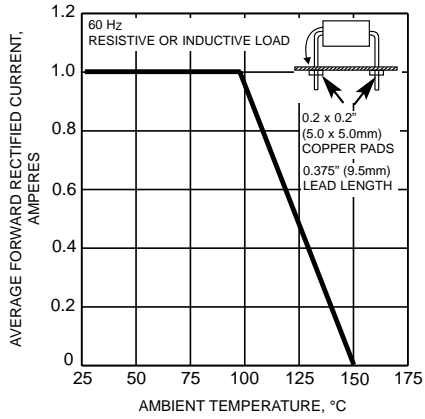


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

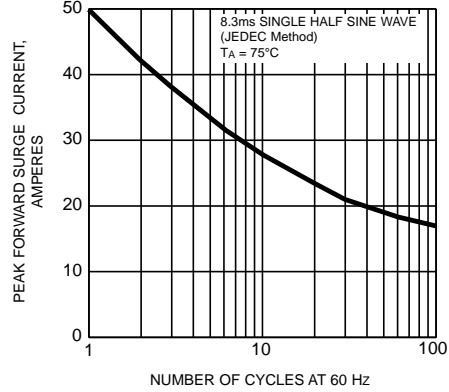


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

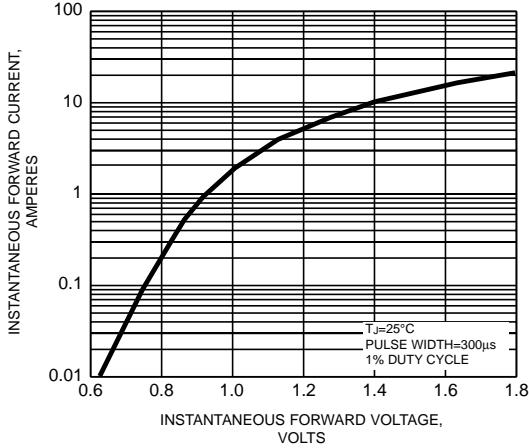


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

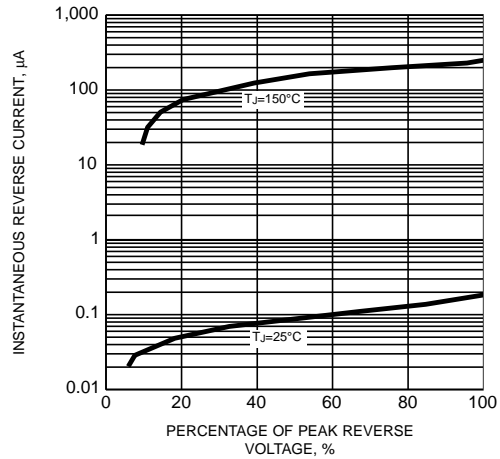


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

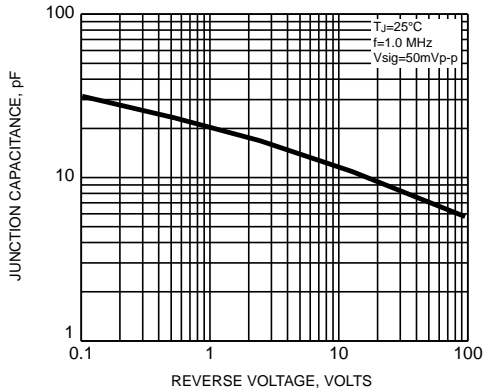


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

