

SMD Switching Diode

Features

- Fast Switching Speed
- Electrically Identical to Standard JEDEC
- High Conductance
- Axial Lead Package Ideally Suited for Automatic Insertion
- RoHS Compliant



DO-35



Mechanical Data

Case:	Molded glass DO-35
Terminals:	Solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Weight:	Approx. 0.13 grams

Maximum Ratings and Electrical Characteristics ($T_A=25^{\circ}\text{C}$ unless noted otherwise)

Symbol	Description	1N4454	Unit	Conditions
V_R	Reverse Voltage	50	V	
V_{RRM}	Peak Reverse Voltage	75	V	
V_{RMS}	RMS Voltage	50	V	
$I_{F(AV)}$	Maximum Average Forward Rectified Current	150	mA	$T_A=25^{\circ}\text{C}$, $f \geq 50\text{Hz}$
I_{FSM}	Peak Forward Surge Current	500	mA	$t < 1\text{S}$, $T_J=25^{\circ}\text{C}$
P_{TOT}	Power Dissipation at $T_A=25^{\circ}\text{C}$	500	mW	
V_F	Maximum Instantaneous Forward Voltage	1.0	V	$I_F=10\text{mA}$
I_R	Maximum Leakage Current	100	nA	$V_R=50\text{V}$, $T_J=150^{\circ}\text{C}$

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Symbol	Description	1N4454	Unit	Conditions
C_J	Maximum Capacitance	4	pF	V _R =0, f=1MHz
T_{rr}	Maximum Reverse Recovery Time	4	nS	From I _F =10mA to I _R =1mA, V _R =6V, R _L =100Ω
R_{thJA}	Maximum Thermal Resistance	350	°C / W	
T_J, T_{STG}	Operating Junction and Storage Temperature Range	-65 to +175	°C	

Rating and Characteristics Curves

Fig.1 Admissible Repetitive Peak Forward Current Vs Pulse Duration

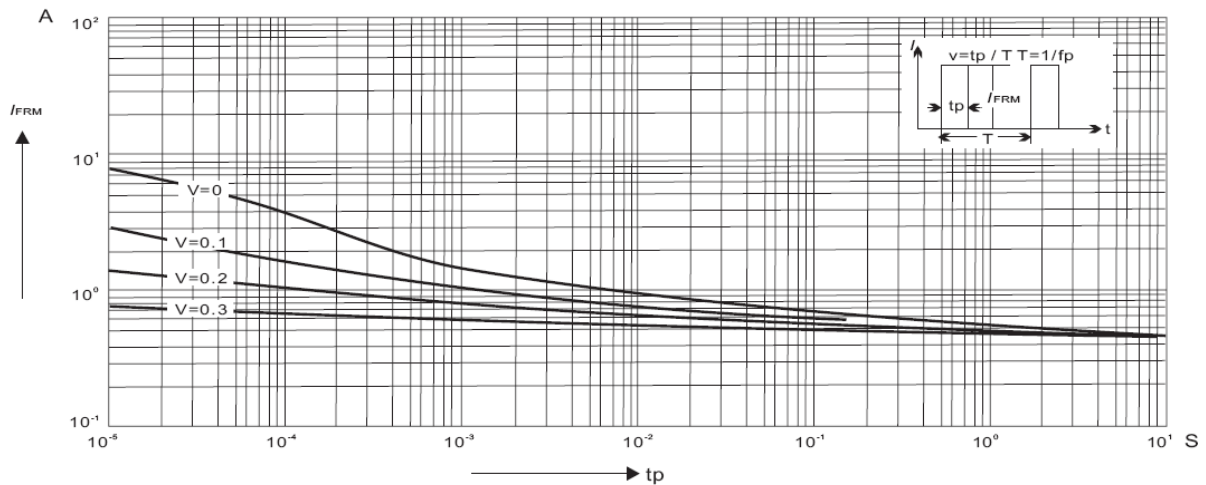


Fig.2 Dynamic Forward Resistance Vs Forward Current

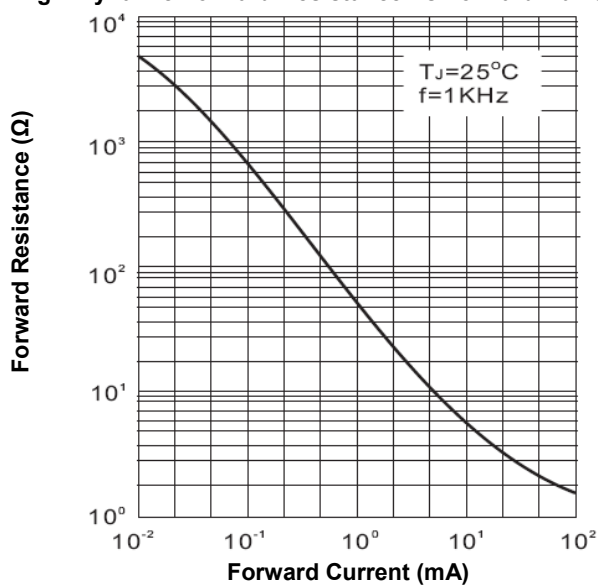
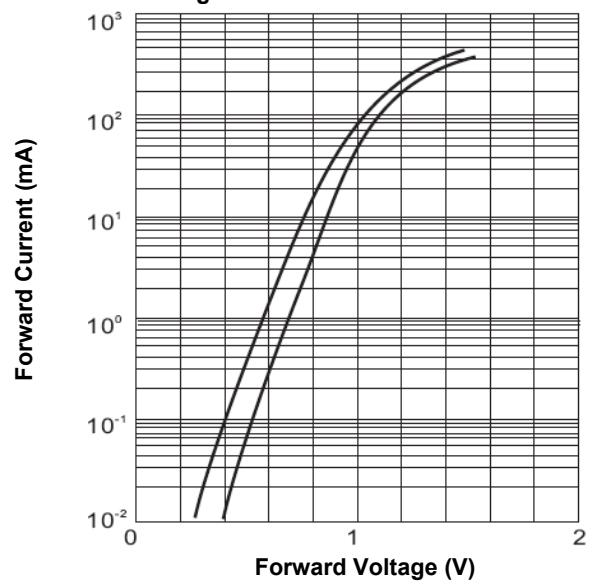


Fig.3 Forward Characteristics



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Fig.4 Derating Curve

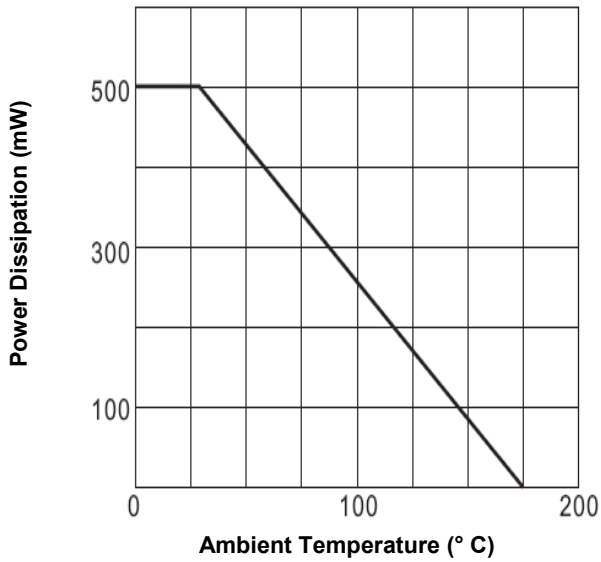
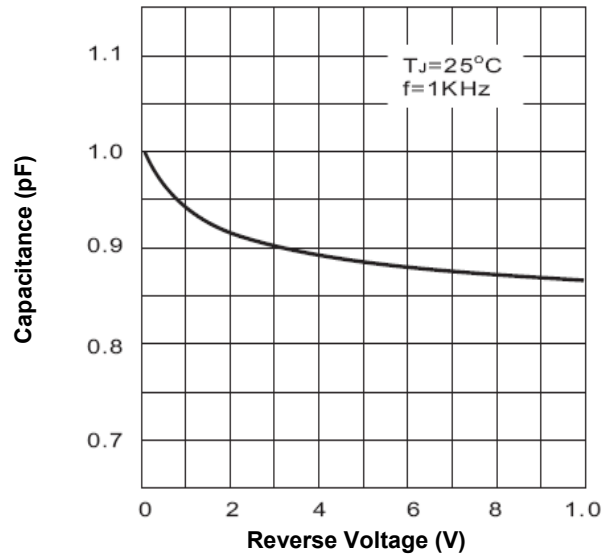
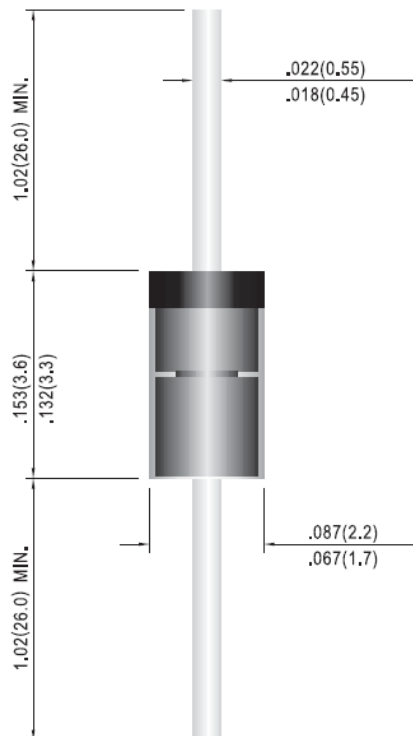


Fig.5 Typical Junction Capacitance



Dimensions in mm (inch)



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