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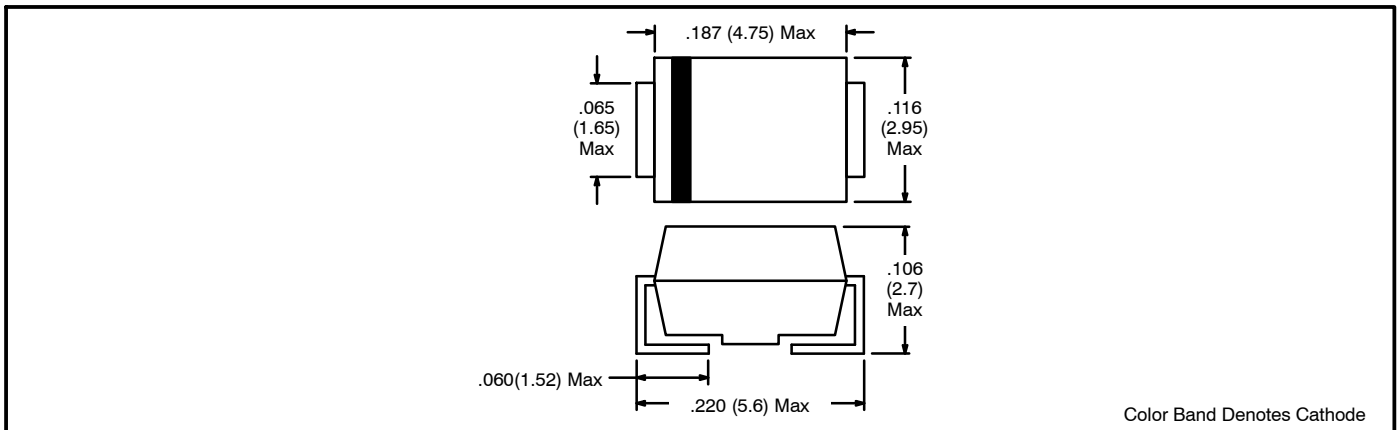
## NTE649D, NTE649G, NTE649J, NTE649M Fast Rectifier DO-214AC (SMA) Type Package

**Maximum Ratings and Electrical Characteristics:** ( $T_A = +25^\circ\text{C}$ , Note 1, unless otherwise specified)

Maximum Repetitive Reverse Voltage, $V_{RRM}$	
NTE649D .....	200V
NTE649G .....	400V
NTE649J .....	600V
NTE649M .....	1000V
Average Rectified Forward Current ( $T_A = +100^\circ\text{C}$ ), $I_{F(AV)}$ .....	
1A	
Non-Repetitive Peak Forward Surge Current (8.3ms Single Half Sine-Wave), $I_{FSM}$ .....	
30A	
Power Dissipation, $P_D$ .....	
1.19W	
Forward Voltage ( $I_F = 1\text{A}$ ), $V_F$ .....	
1.3V	
Reverse Recovery Time ( $I_F = 0.5\text{A}$ , $I_R = 1\text{A}$ , $I_{rr} = 0.25\text{A}$ ), $t_{rr}$	
NTE649D, NTE649G .....	150ns
NTE649J .....	250ns
NTE649M .....	500ns
Reverse Current (at Rated $V_R$ ), $I_R$	
$T_A = +25^\circ\text{C}$ .....	5 $\mu\text{A}$
$T_A = +125^\circ\text{C}$ .....	50 $\mu\text{A}$
Total Capacitance ( $V_R = 4\text{V}$ , $f = 1\text{MHz}$ ), $C_T$ .....	
10pF	
Operating Junction Temperature Range, $T_J$ .....	
$-55^\circ$ to $+150^\circ\text{C}$	
Storage Temperature Range, $T_{stg}$ .....	
$-55^\circ$ to $+150^\circ\text{C}$	
Thermal Resistance (Note 2)	
Junction-to-Ambient, $R_{thJA}$ .....	105 $^\circ\text{C}/\text{W}$
Junction-to-Lead, $R_{thJL}$ .....	32 $^\circ\text{C}/\text{W}$

Note 1. Stresses exceeding the “Absolute Maximum Ratings” may damage the device. The device may not function or be operable above the recommended operating conditions and stressing the parts to these levels is not recommended. In addition, extended exposure to stresses above the recommended operating conditions may affect device reliability. The “Absolute Maximum Ratings” are stress ratings only.

Note 2. Device mounted on FR-4 PCB 0.013mm.



Color Band Denotes Cathode

