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1N645 General Purpose Silicon Rectifier

Description:

The 1N645 is a general purpose silicon rectifier in a DO-35 case designed for use in power applications, or for clipping and steering applications.

Maximum Ratings and Electrical Characteristics:

Power Dissipation (3/8" from body $T_L = +75^\circ\text{C}$), P_{tot}	600mW
Average Rectified Forward Current ($T_L = +75^\circ\text{C}$), I_{AV}	400mA
Reverse Voltage, V_R	225V
Min. Breakdown Voltage (at 100 μA), B_V	275V
Maximum Average Rectified Current, I_O	
$T_A = +25^\circ\text{C}$	400mA
$T_A = +150^\circ\text{C}$	150mA
Maximum Forward Voltage Drop ($I_F = 400\text{mA}$), V_F	1V
Maximum Reverse Leakage Current ($V_R = 225\text{V}$), I_R	
$T_A = +25^\circ\text{C}$	0.2 μA
$T_A = +100^\circ\text{C}$	15 μA
Maximum Surge Current (Note 1), I_{FSM}	3A
Typical Junction capacitance (at -12V), C_O	9pF
Operating Junction Temperature Range, T_J	-65° to $+175^\circ\text{C}$
Storage Temperature Range, T_{stg}	-65° to $+175^\circ\text{C}$
Maximum Thermal Impedance, Z_{qjX}	35 $^\circ\text{C/W}$

Note 1. Surge Current @ $T_A = +25^\circ$ to $+150^\circ\text{C}$, for 1 second.

