

# Spice Model

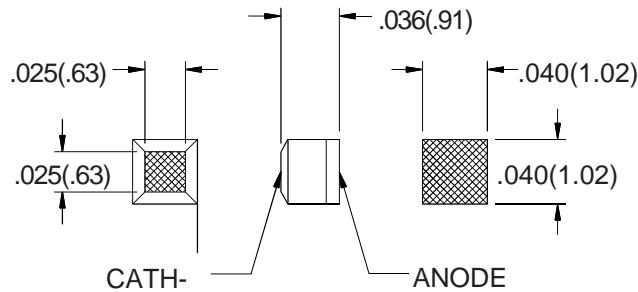


D40U18R



## Electrical Characteristics and Maximum Ratings

Part Number	Working Reverse Voltage (V <sub>rw</sub> )	Average Rectified Current (I <sub>o</sub> )		Reverse Current @ V <sub>rw</sub> (I <sub>r</sub> )		Forward Voltage (V <sub>f</sub> )		1 Cycle Surge Current t <sub>p</sub> =8.3ms (I <sub>fsm</sub> )	Repetitive Surge Current (I <sub>frm</sub> )	Reverse Recovery Time (3) (T <sub>rr</sub> )	Thermal Impedance $\theta_{J-L}$	Junction Cap. @ 50VDC @ 1kHz (C <sub>j</sub> )
		55°C(1)	100°C(2)	25°C	100°C	25°C		25°C	25°C	25°C	25°C	25°C
		Amps	Amps	µA	µA	Volts	A	Amps	Amps	ns	°C/W	pF
D40U18R	1800	0.050	0.025	.25	10	8.0	0.10	1.0	0.2	70	10	35



Plating:  
50µin silver over 50µin nickel.

Name	Parameter	Value	Units
IS	Reverse leakage current	1.0E-07	Amps
N	Emission coefficient	17.6	
T	Temperature	25	C
RS	Diode series resistance	1.6	Ohm
TT	Transit time	70	nS
CJ0	Zero-bias junction capacitance	4.77	pF
VJ	Bulk junction potential	1.23	Volts
M	Grading coefficient	0.5	
EG	Energy-band gap	1.11	Volts
XTI	Temperature coefficient	3	
KF	Flicker-noise coefficient	0	
AF	Flicker-noise exponent	1	
FC	Coefficient for capacitance	0.5	
BV	Diode breakdown voltage	2200	Volts
IBV	Diode breakdown current	100	uAmps

Dimensions: In. (mm) \* All temperatures are ambient unless otherwise noted. \* Data subject to change without notice.



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