

Features

- Small Surface Mounting Type
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 1)

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +125°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 1000°C/W Junction to Ambient

MCC Part Number	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
RB520S-40L2	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value
Average Rectified Current	$I_{F(AV)}$	200mA
Peak Forward Surge Current	I_{FSM}	1A
Power Dissipation	P_D	100mW

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

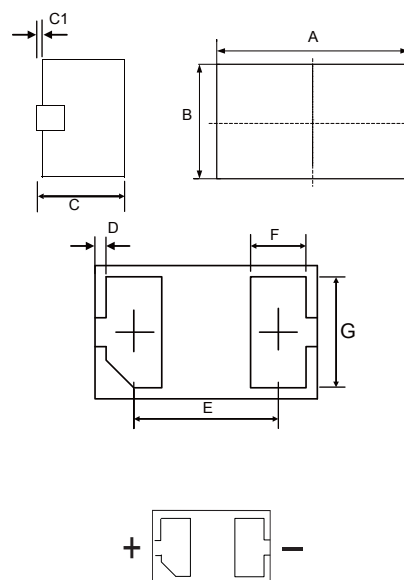
2. Valid Provided that Terminals are Kept at Ambient Temperature.

Internal Structure and Marking Code



100 mW Schottky Rectifier 40 Volts

DFN1006-2L



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.037	0.041	0.95	1.05	
B	0.022	0.026	0.55	0.65	
C	0.016	0.020	0.40	0.50	
C1	-----	0.002	-----	0.05	
D	0.001	0.003	0.02	0.08	
E	0.026BSC		0.65BSC		
F	0.008	0.012	0.20	0.30	
G	0.018	0.022	0.45	0.55	

Electrical Characteristics @ 25°C (Unless Otherwise Specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	40			V
Forward Voltage	V_F	$I_F=10mA$			0.39	V
		$I_F=100mA$			0.55	V
Reverse Current	I_R	$V_R=10V$			1	μA
		$V_R=40V$			10	μA
Junction Capacitance	C_J	$V_R = 0V, f = 1MHz$			20	pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=10mA,$ $I_{rr}=0.1 \times I_R, R_L=100\Omega$			5	ns

* Pulse Test: Pulse Width 300 μsec , Duty Cycle 2%

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

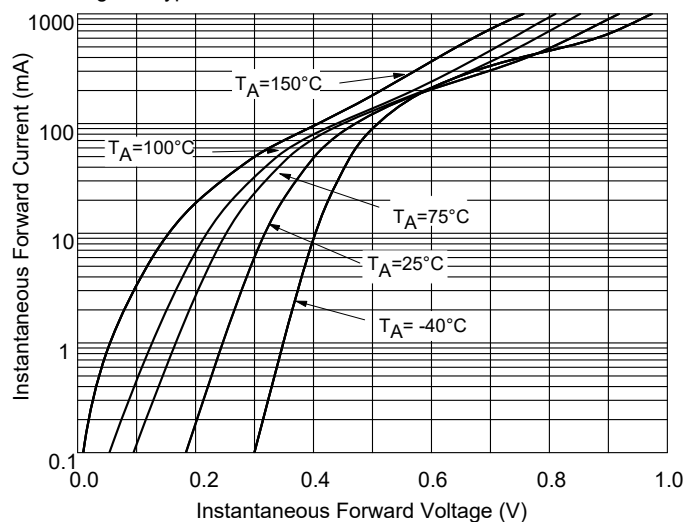


Fig. 2 - Typical Reverse Leakage Characteristics

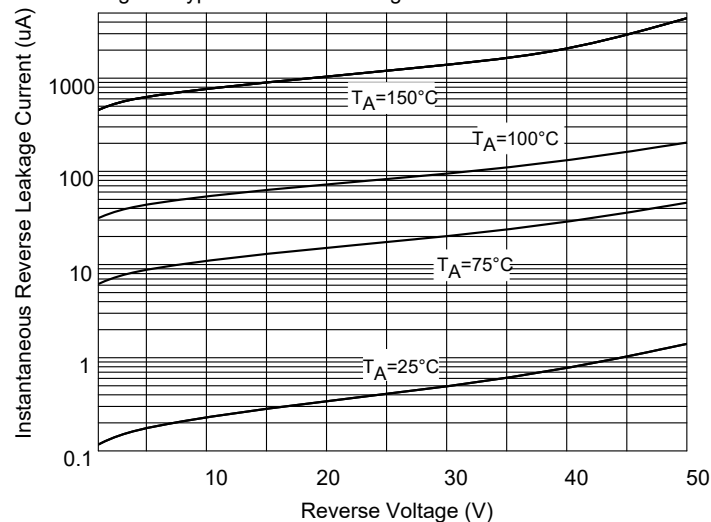


Fig. 3 - Capacitance Characteristics

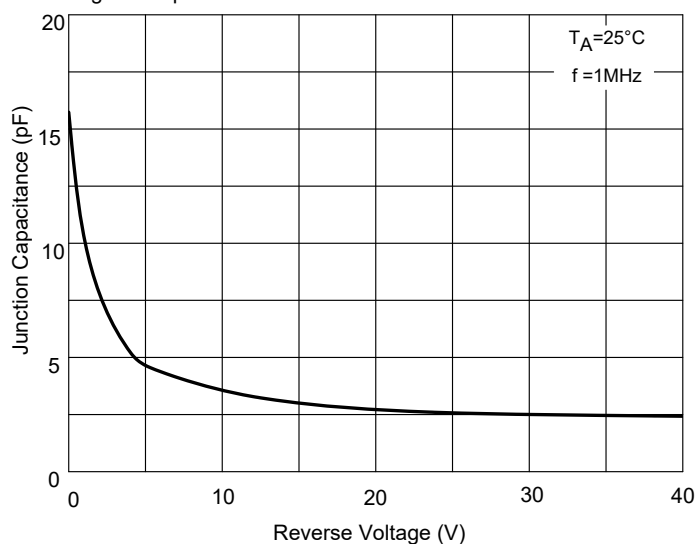
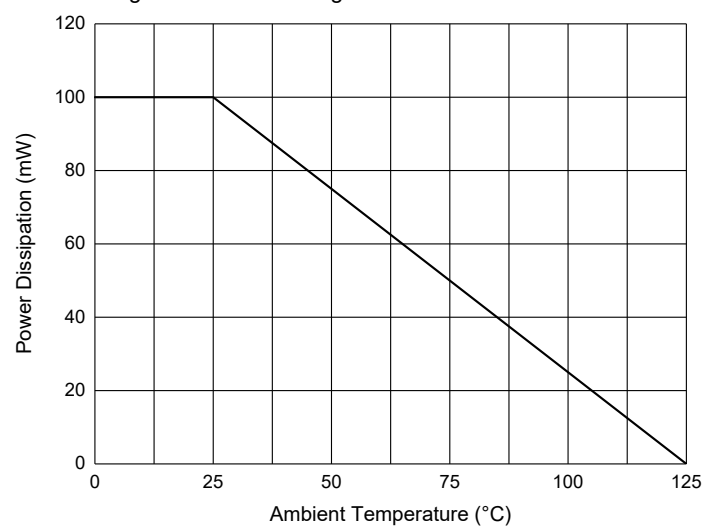


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel;10Kpcs/Reel

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