

Features

- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)
- Low Forward Voltage Drop and Low Leakage Current
- Guard Ring Construction for Transient Protection
- Fast Switching
- Three Fully Isolated Schottky Diodes
- Halogen Free. "Green" Device (Note 1)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

Maximum Ratings

- Operating Junction Temperature Range: 125°C
- Storage Temperature Range: -55°C to +125°C
- Thermal Resistance: 500°C/W Junction To Ambient

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
SD103ATW	KLL	40V	28V	40V

Electrical Characteristics @ 25°C Unless Otherwise Specified

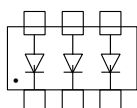
Forward Continuous Current(Note1)	I_{FM}	350mA	
Average Rectified Output Current(Note2)	I_O	175mA	
Peak Forward Surge Current	I_{FSM}	1A	$t \leq 10ms$
Power Dissipation	P_d	200mW	
Reverse Breakdown Voltage	V_{BR}	40V(Min)	$I_R = 100\mu A$ dc(note.2)
Reverse Voltage Leakage Current(Note3)	I_R	2 μA (Max) 5 μA (Max)	$V_R = 10V$ $V_R = 30V$
Forward Voltage(Note3)	V_F	0.27V(Max) 0.32V(Max) 0.37V(Max) 0.50V(Max)	$I_F = 1mA$ $I_F = 5mA$ $I_F = 20mA$ $I_F = 100mA$
Total Capacitance	C_T	50pF(Max)	$V_R = 0V, f = 1.0MHz$
Reverse Recovery Time	t_{rr}	10ns(Max)	$I_F = I_R = 200mA$, $I_{rr} = 0.1 * I_R, R_L = 100\Omega$

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. This is the maximum rating of single Diode (D1 or D2 or D3). In the case of using two or three diodes, the maximum ratings per diode are 75% of the ratings for single diode operation.

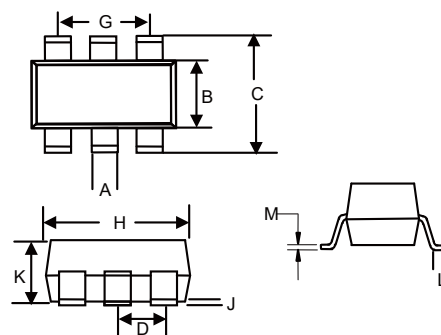
3. Short duration test pulse used to minimize self-heating effect.

Internal Structure:



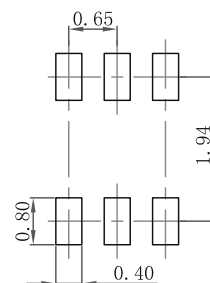
200 mW Schottky Barrier Diode

SOT-363



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.014	0.15	0.35	
B	0.045	0.053	1.15	1.35	
C	0.079	0.096	2.00	2.45	
D		0.026	0.65 Nominal		
G	0.047	0.055	1.20	1.40	
H	0.071	0.087	1.80	2.20	
J		0.004		0.10	
K	0.031	0.043	0.80	1.10	
L	0.010	0.018	0.26	0.46	
M	0.003	0.006	0.08	0.15	

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Characteristics

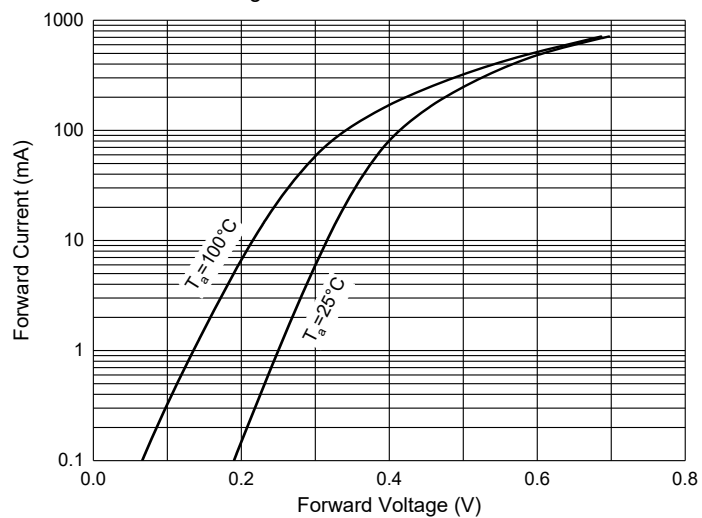


Fig. 2 - Reverse Characteristics

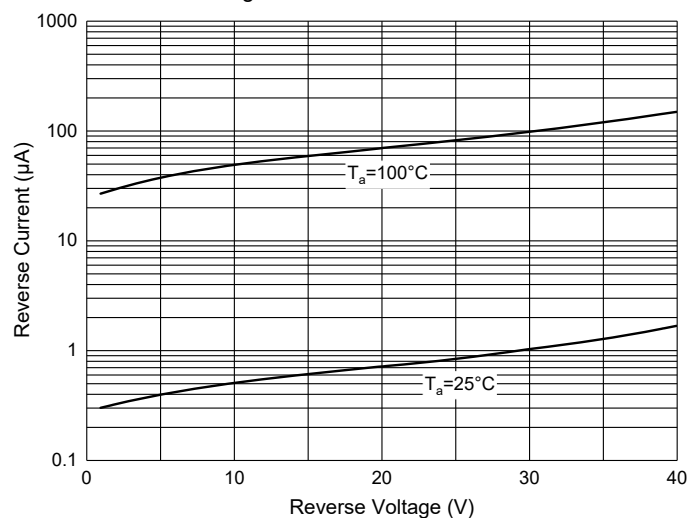


Fig. 3 - Capacitance Characteristics

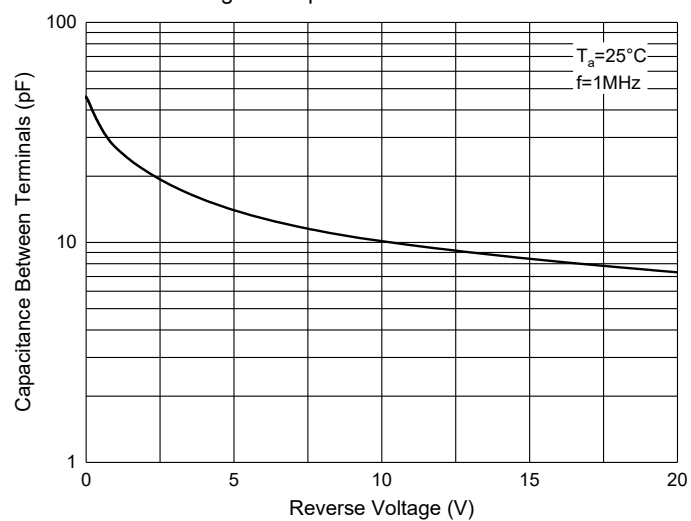
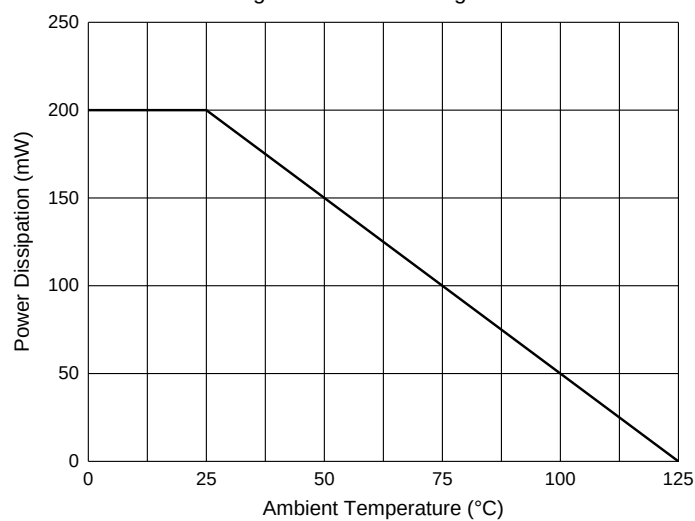


Fig. 4 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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