

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 Available Upon Request By Adding Suffix "-HF"
- 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

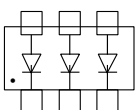
Electrical Characteristics @ 25°C Unless Otherwise Specified

Forward Continuous Current(Note1)	I_{FM}	350mA	
Average Rectified Output Current(Note1)	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)	$I_R = 100\mu A_{dc}(\text{note.2})$
Reverse Voltage Leakage Current(Note2)	I_R	2 μA (Max) 5 μA (Max)	$V_R = 10V$ $V_R = 30V$
Forward Voltage(Note2)	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)	$I_F = I_R = 200mA,$ $I_{rr} = 0.1 * I_R, R_L = 100\Omega$

Notes: 1. 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.

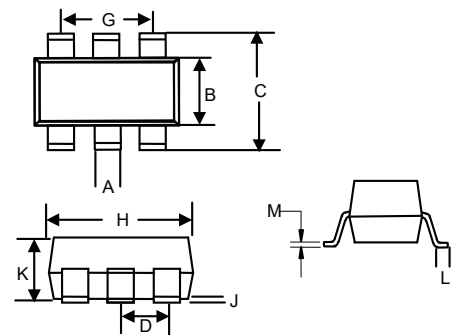
2. Short duration test pulse used to minimize self-heating effect.

Internal Structure:



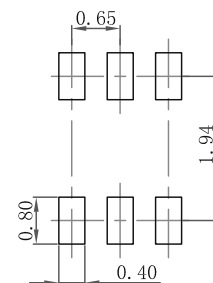
**200 mW
Schottky Barrier
Diode**

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

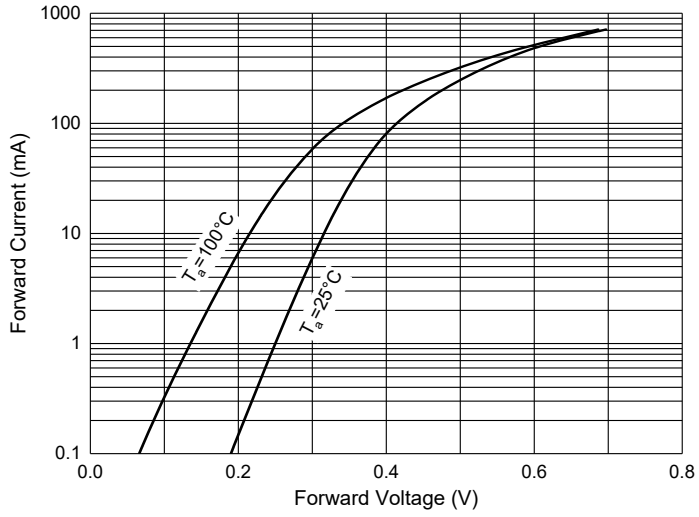


Fig. 2 - Reverse Characteristics

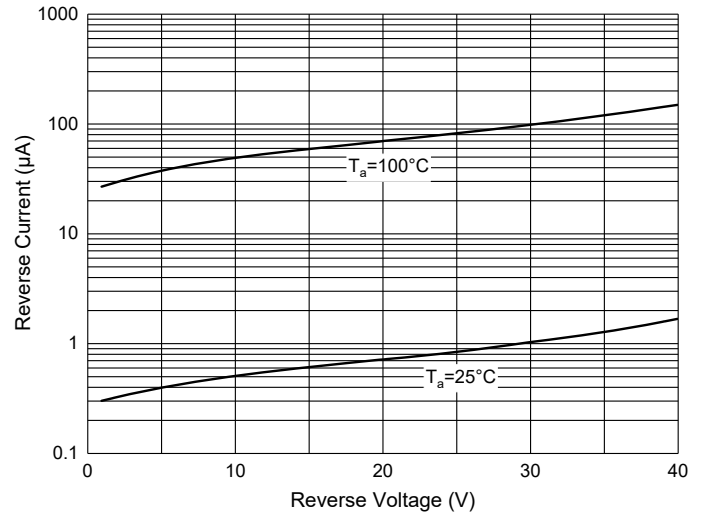


Fig. 3 - Capacitance Characteristics

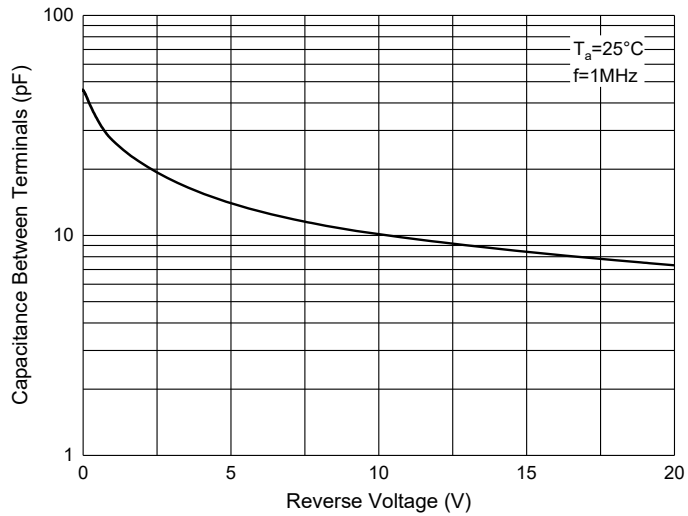
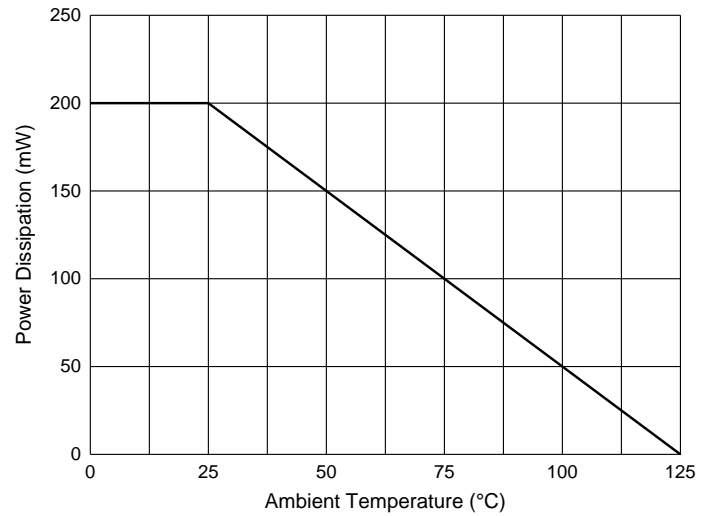


Fig. 4 - Power Derating Curve



Ordering Information

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

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
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Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.