Features

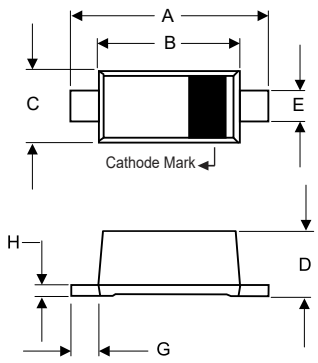
- Halogen Free. "Green" Device (Note 1)
- Fully Automotive Qualified to AEC-Q101
- Low Profile Package
- High Surge Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Lead Free Finish/RoHS Compliant (Note 2)("P" Suffix Designates RoHS Compliant. See Ordering Information)

2 Amp Surface Mount Schottky Rectifier 40 to 60 Volts

Maximum Ratings @ 25°C (Unless Otherwise Specified)

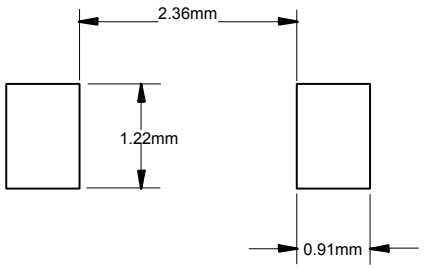
Parameter	Symbol	Value		Unit
		SMD24PLQ	SMD26PLQ	
Peak Repetitive Reverse Voltage	V_{RRM}	40	60	V
Working Peak Reverse Voltage	V_{RWM}			
DC Blocking Voltage	V_R			
RMS Reverse Voltage	V_{RMS}	28	42	V
Average Rectified Forward Current @ T_L=110°C	$I_{F(AV)}$	2		A
Non−Repetitive Peak Surge Current @8.3ms Half Sine Wave	I_{FSM}	50		A
Current Squared Time @ 1ms≤t≤8.3ms	I^2t	10.375		A^2s

SOD-123FL



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

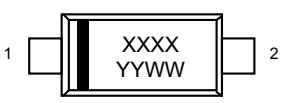
SUGGESTED SOLDER PAD LAYOUT



Marking code

Part Number	Marking code
SMD24PLQ	M4
SMD26PLQ	M6

Internal Structure

Pin	Description	Simplified outline	Graphic symbol
1	cathode		
2	anode		

XXXX = Marking code
YYWW = Date Code

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. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

Thermal characteristics

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
T_J	Operating Junction Temperature Range		-55		150	°C
T_{stg}	Storage Temperature Range		-55		150	°C
$Rth_{(J-L)}$	Thermal Resistance from Junction to Lead	Note 1		35		°C/W
$Rth_{(J-A)}$	Thermal Resistance from Junction to Ambient	Note 1		85		°C/W

Note:
1.Mounted on P.C.B. with 3mm*3mm copper pad areas.

Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Voltage						
SMD24PLQ	V_F	I_F=2A;T_J=25°C		0.50	0.55	V
		I_F=2A;T_J=125°C		0.42	0.45	
SMD26PLQ		I_F=2A;T_J=25°C		0.60	0.70	
		I_F=2A;T_J=125°C		0.55	0.63	
Reverse Current						
SMD24PLQ	I_R	at Rated V_R;T_J=25°C			0.1	mA
		at Rated V_R;T_J=125°C			10	
SMD26PLQ		at Rated V_R;T_J=25°C			0.1	
		at Rated V_R;T_J=125°C			10	
Junction Capacitance						
SMD24PLQ	C_J	V_R=4V;f=1MHz;T_J=25°C		115		pF
SMD26PLQ				95		

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

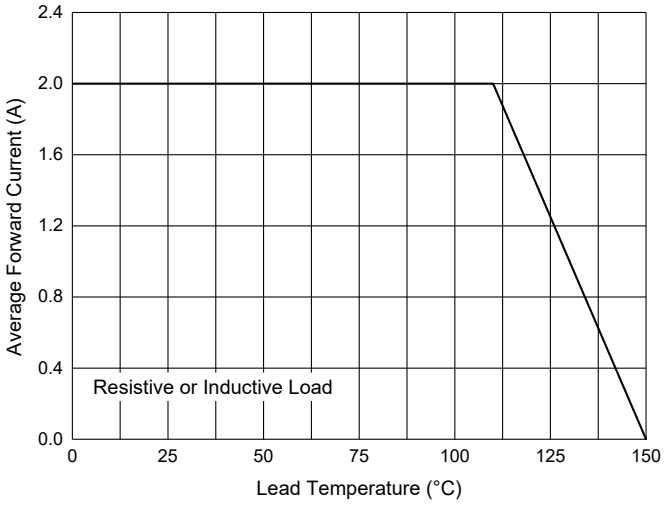


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

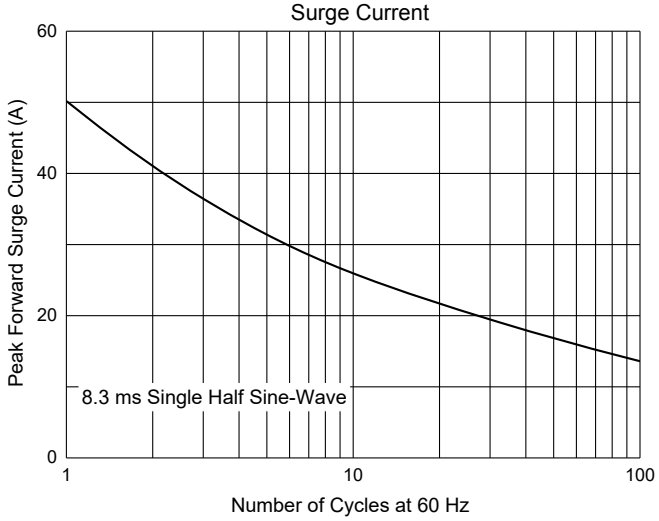


Fig. 3 - Typical Forward Characteristics

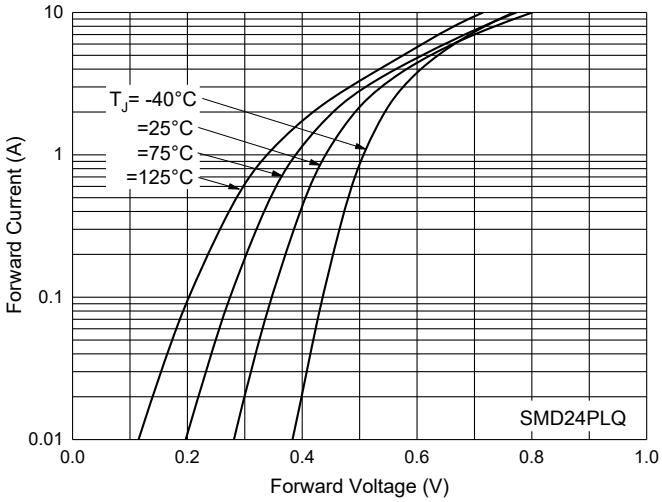


Fig. 4 - Typical Reverse Leakage Characteristics

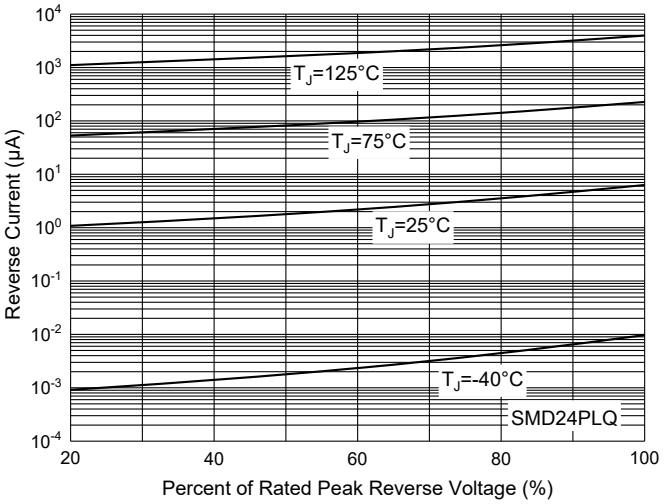


Fig. 5 - Typical Forward Characteristics

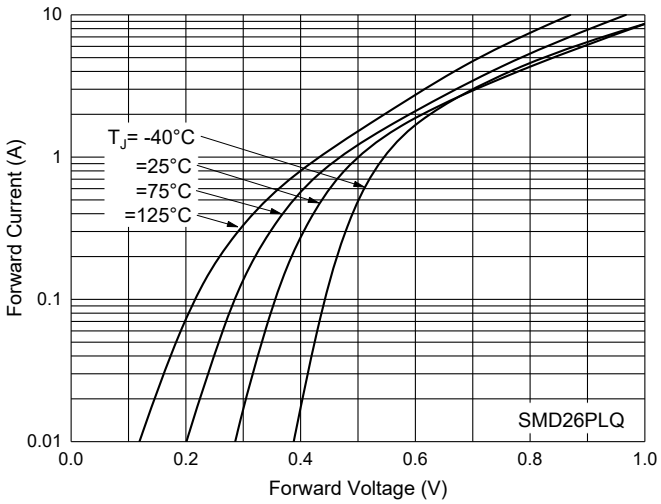
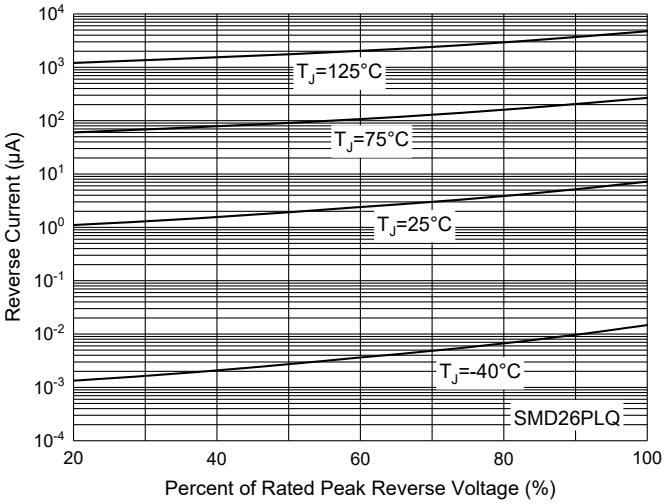


Fig. 6 - Typical Reverse Leakage Characteristics



Curve Characteristics

Fig. 7 - Capacitance Characteristics

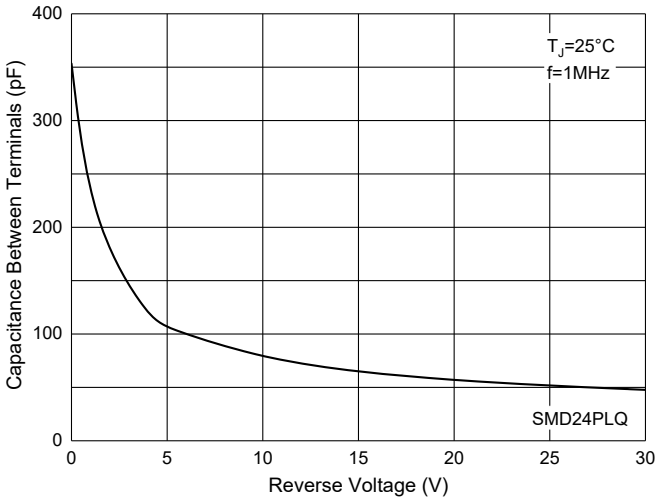
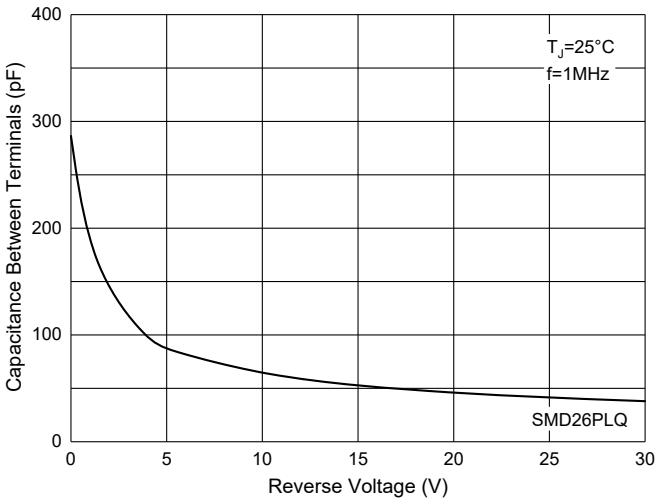


Fig. 8 - Capacitance Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:2.5Kpcs/Reel