

### 1A Surface Mount Schottky Rectifiers

#### Features

- Low profile in Melf (GL-41) package
- Low power loss, high efficiency
- Low forward voltage drop; Low leakage current
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- RoHS Compliant



Melf



#### Mechanical Data

<b>Case:</b>	JEDEC Melf (GL-41), molded plastic case
<b>Terminals:</b>	Solder plated, solderable per MIL-STD-750, Method 2026 Pure Tin plated, Pass Whisker test Class 1A per JESD 201
<b>Polarity</b>	Color band denotes the cathode end
<b>Weight</b>	0.15 gram

#### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	MLL5817	MLL5818	MLL5819	Unit	Conditions
		SGL41-20	SGL41-30	SGL41-40		
<b>VRRM</b>	Max. Repetitive Peak Reverse Voltage	20	30	40	V	
<b>VRMS</b>	Max. RMS Voltage	14	21	28	V	
<b>VDC</b>	Max. DC Blocking Voltage	20	30	40		
<b>IF(AV)</b>	Average Forward Rectified Current	1.0			A	TL=50°C
<b>IFSM</b>	Peak Forward Surge Current	25			A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
<b>VF</b>	Max. Instantaneous Forward Voltage	0.45	0.50	0.55	V	IF=1.0A
<b>IR</b>	Max. Reverse Current @ VR = VRRM	1.0			mA	TA=25°C
		10			mA	TA=100°C
<b>RthJA</b>	Thermal Resistance Junction to Ambient	75			°C / W	
<b>CJ</b>	Junction Capacitance	80			pF	VR=4V, f=1MHz
<b>TJ,TSTG</b>	Operating Junction and Storage Temperature Range	-55 to +125			°C	

# 1A Surface Mount Schottky Rectifiers

## MLL5817~MLL5819/SGL41-20~SGL41-40

### Typical Characteristics Curves

Fig.1- Forward Current Derating Curve

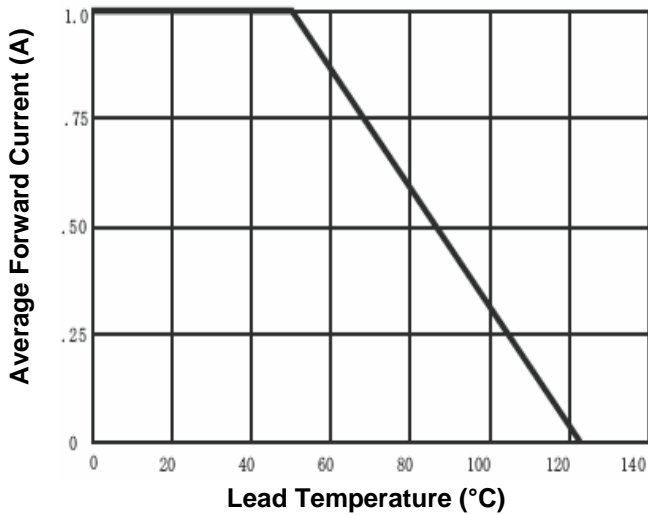


Fig.2- Non-repetitive Peak Forward Surge Current

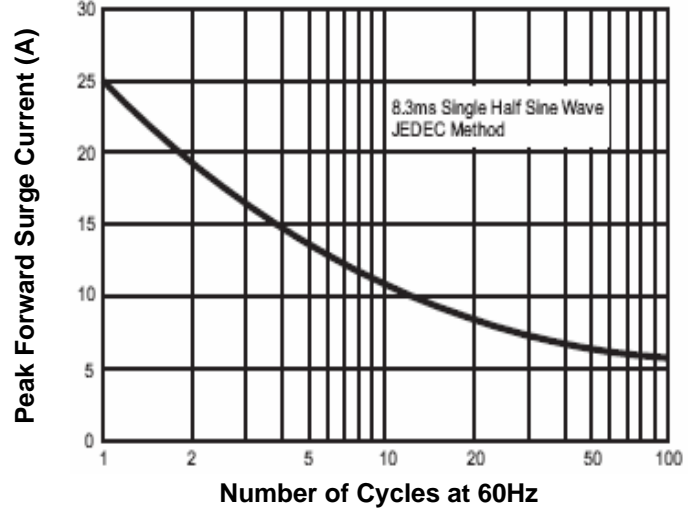


Fig.3- Typical Instantaneous Forward Characteristics

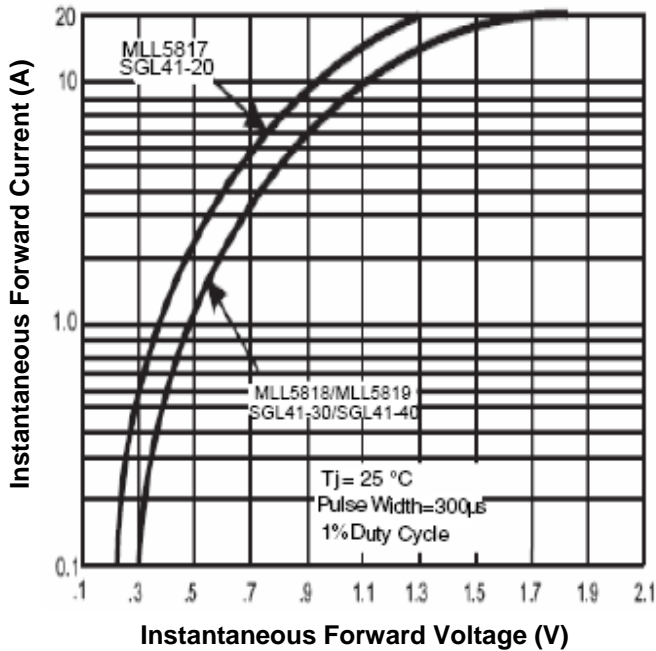
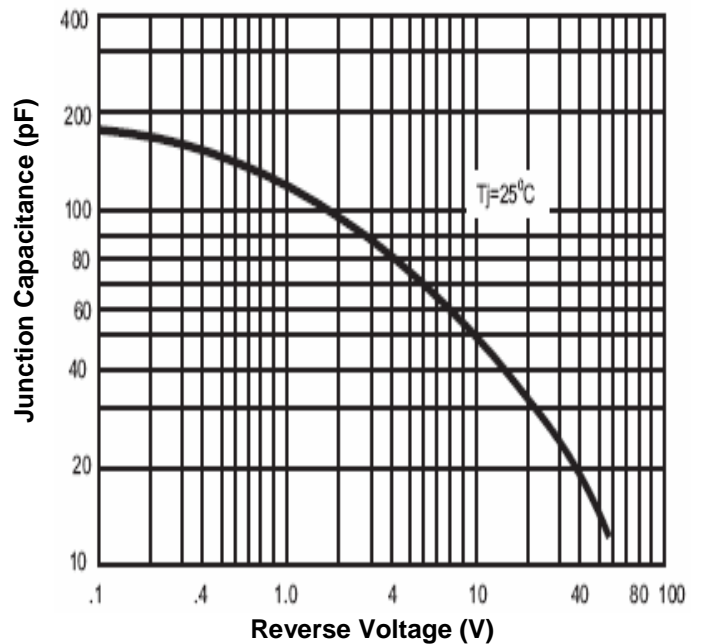


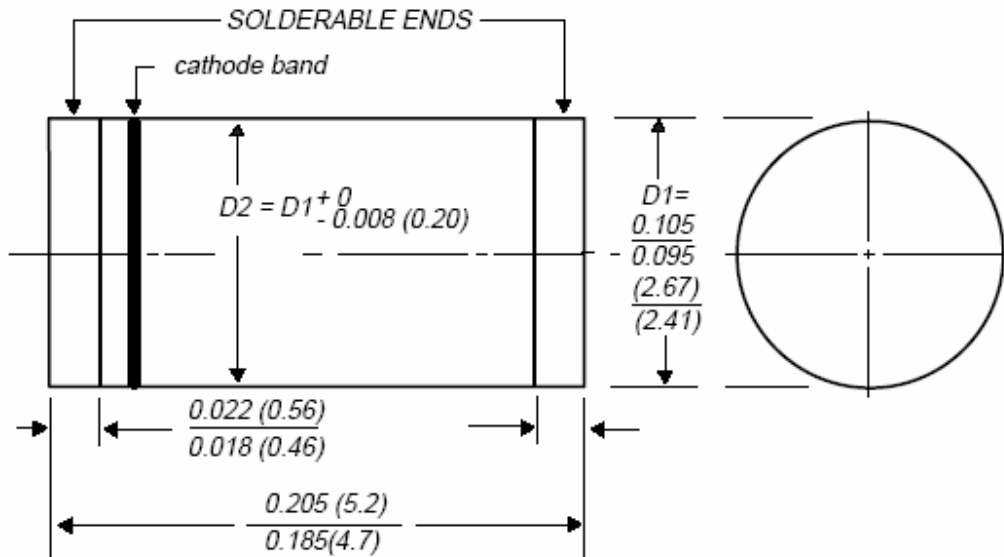
Fig.4- Typical Junction Capacitance



# 1A Surface Mount Schottky Rectifiers

## MLL5817~MLL5819/SGL41-20~SGL41-40

### Dimensions in inches (mm)



Melf

### How to contact us

#### US HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800) TAITRON (800) 247-2232 (661) 257-6060

Fax: (800) TAITFAX (800) 824-8329 (661) 257-6415

Email: [taitron@taitroncomponents.com](mailto:taitron@taitroncomponents.com)

Http://[www.taitroncomponents.com](http://www.taitroncomponents.com)

#### TAITRON COMPONENTS MEXICO, S.A .DE C.V.

BOULEVARD CENTRAL 5000 INTERIOR 5 PARQUE INDUSTRIAL ATITALAQUIA, HIDALGO C.P.

42970 MEXICO

Tel: +52-55-5560-1519

Fax: +52-55-5560-2190

#### TAITRON COMPONENTS INCORPORATED REPRESENTAÇÕES DO BRASIL LTDA

RUA DOMINGOS DE MORAIS, 2777, 2.ANDAR, SALA 24 SAÚDE - SÃO PAULO-SP 04035-001 BRAZIL

Tel: +55-11-5574-7949

Fax: +55-11-5572-0052

#### TAITRON COMPONENTS INCORPORATED, SHANGHAI REPRESENTATIVE OFFICE

METROBANK PLAZA, 1160 WEST YAN' AN ROAD, SUITE 1503, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-5424-9931