

Obsolete

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Micro Commercial Components



Micro Commercial Components
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LS103A
LS103B
LS103C

Features

- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Small surface mounting type(Quadro Melf)
- High reliability
- Low reverse current and low forward voltage
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

Applications

- Low current rectification and high speed switching

Maximum Ratings*

Parameter	Symbol	Value	Units
Repetitive peak reverse voltage	V_R		
LS103A		40	V
LS103B		30	V
LS103C		20	V
Power Dissipation at $T_{amb}=25^{\circ}C$	P_D	400	mW
Forward current	I_{FM}	350	mA
Repetitive peak forward current $t_p \leq 1$ s	I_{FRM}	1	A
Storage Temperature Range	T_{STG}	-65 to 175	$^{\circ}C$
Thermal Resistance(Junction to Ambient)	R_{thJA}	300	K/W

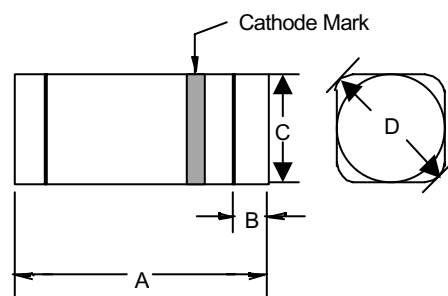
Electrical Characteristics @ 25°C Unless Otherwise Specified

	Symbol	Maximum	Unit
Forward Voltage $I_F=20mA$ $I_F=200mA$	V_F	0.37 0.60	V
Reverse current $V_R=30V$ LS103A $V_R=20V$ LS103B $V_R=10V$ LS103C		5 5 5	μA
Diode capacitance $V_R=V_F=0, f=1MHz$	C_D	50	pF
Reverse recovery time $I_F=I_R=20mA$ to $0.1I_R$	t_{rr}	10	ns

Note: 1. Lead in Glass Exemption Applied, see EU Directive Annex 7(C)-I.

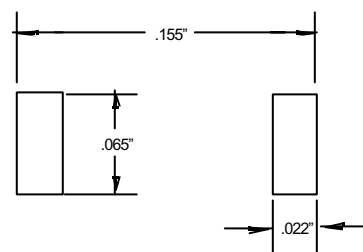
350mA Schottky
Barrier Diode
20~40Volt

Quadro MELF



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	.20	.40	
C	.055	.063	1.40	1.60	Ø
D	.067		1.70		

SUGGESTED SOLDER
PAD LAYOUT



Characteristics ($T_j=25^\circ\text{C}$ unless otherwise specified)

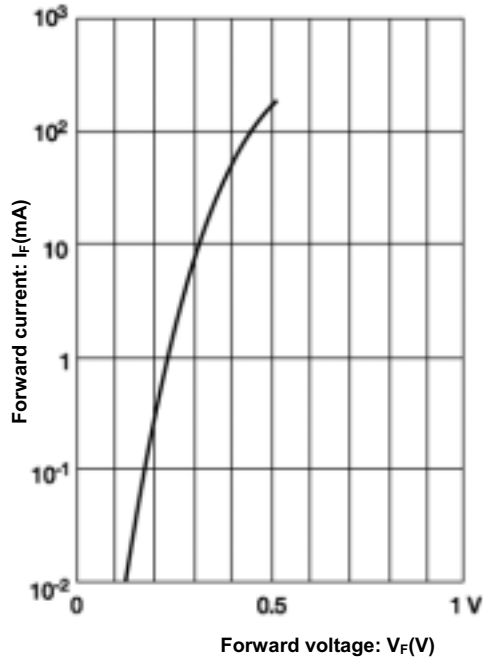


Figure 1. Typical variation of forward current vs. forward voltage for primary conduction through the schottky barrier

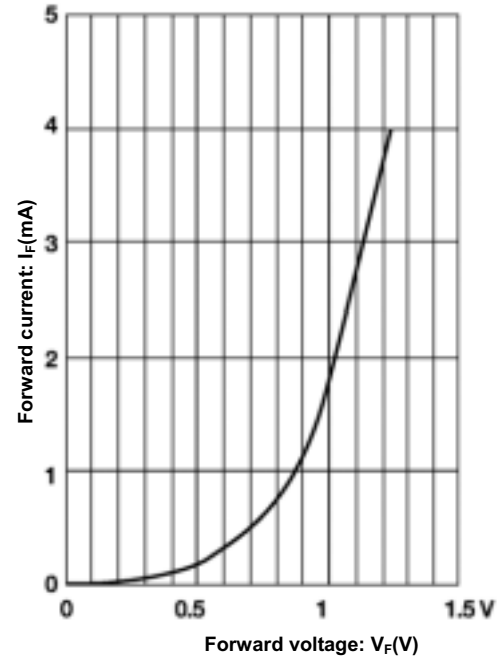


Figure 2. Typical high current forward conduction curve $t_p=300\text{ms}$, duty cycle=2%

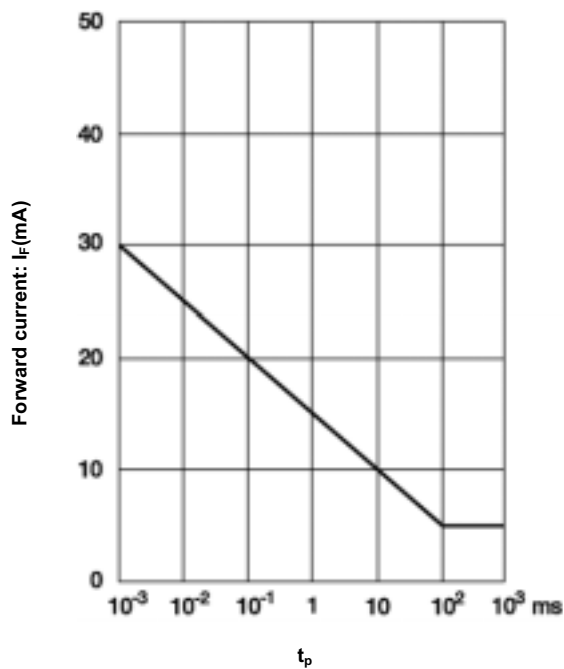


Figure 3. Typical non repetitive forward surge current vs. pulse width

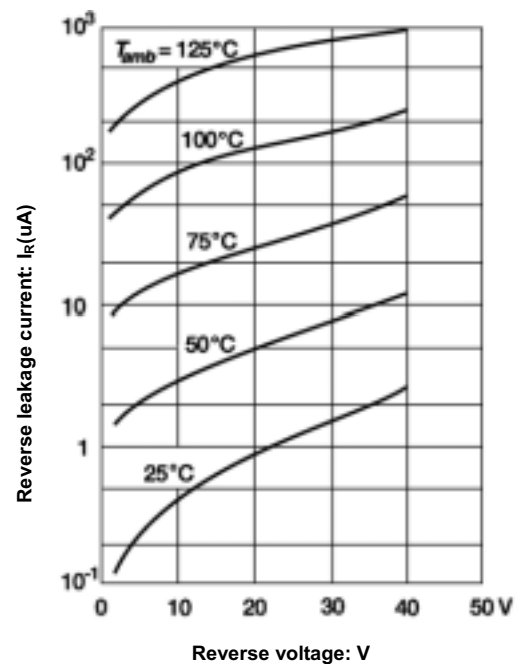


Figure 4. Typical variation of reverse current at various temperatures

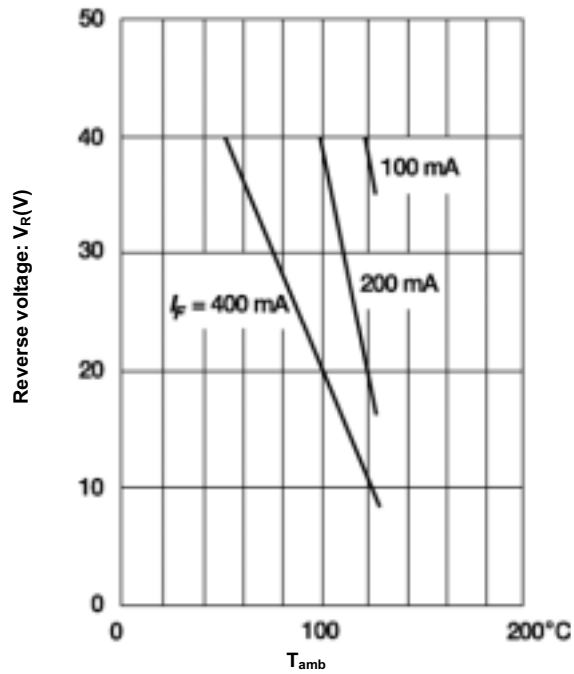


Figure 5. Blocking voltage duration vs. temperature at various average forward current

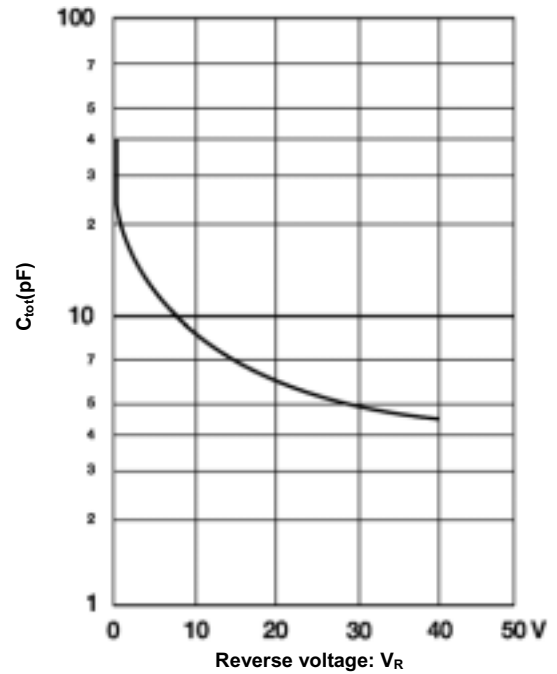


Figure 6. Typical capacitance vs. reverse voltage

Ordering Information :

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

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