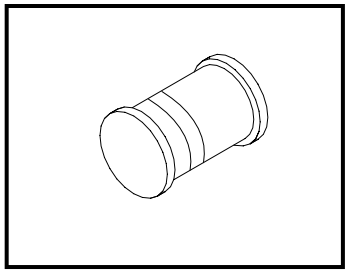
SURFACE MOUNT DIODES

MF400XSL



Description

The MF400XSL is designed for general purpose rectification application in hybrid thick-and thin-film circuits.

Features

- Low forward voltage drop and low leakage current
- High current capability
- High surge current capability
- Plastic material used carries UL flammability classification 94V-0 utilizing flame retardant epoxy molding compound.
- High reliability
- Small surface mount package

Maximum Ratings and Electrical Characteristics

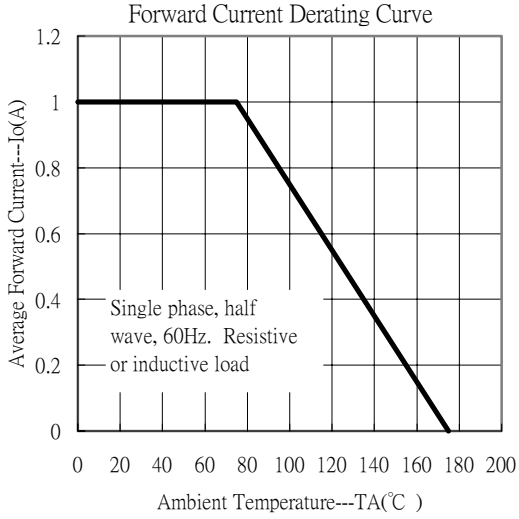
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	MF 4001	MF 4002	MF 4003	MF 4004	MF 4005	MF 4006	MF 4007	Units
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	1							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load(JEDEC method)	30							A
Maximum Instantaneous Forward Voltage @ 1.0A	1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	5 (@Ta=25°C) 50 (@Ta=125°C)							μA
Typical Junction Capacitance (Note 1)	15							pF
Thermal Resistance, Junction to Ambient	50							℃/W
Operating Temperature Range Tj	-65 to +175							°C
Storage Temperature Range Tstg	-65 to +175							°C

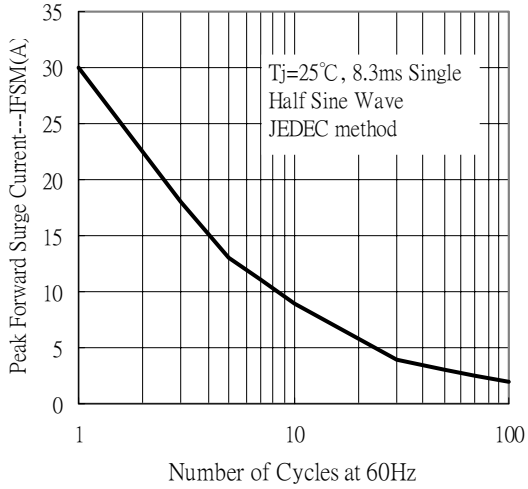
Notes: 1. Measured at 1 MHz and applied reverse voltage of 4.0Volts

Characteristic Curves

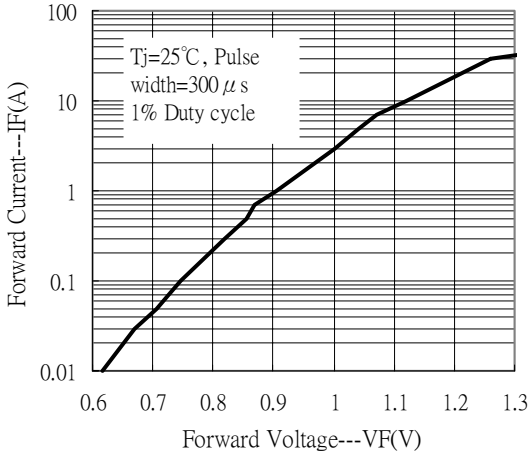
Forward Current Derating Curve



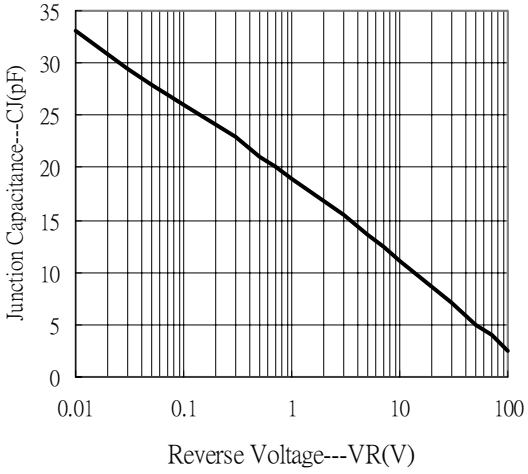
Maximum Non-Repetitive Forward Surge Current



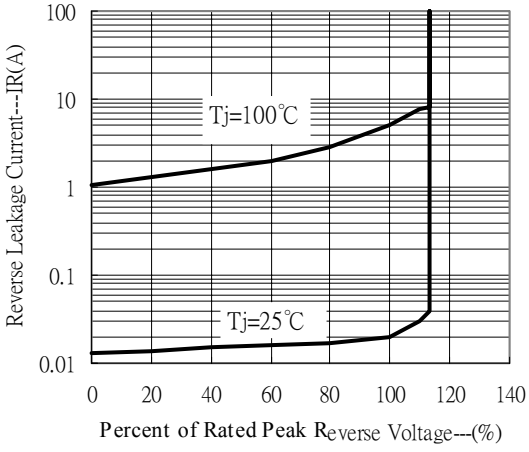
Forward Current vs Forward Voltage



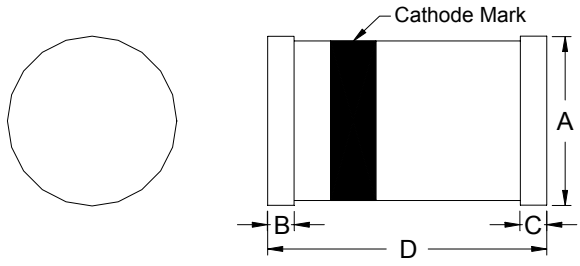
Junction Capacitance vs Reverse Voltage



Reverse Leakage Current vs Reverse Voltage



Melf Dimension



Melf plastic package
CYStek package code:SL

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.095	0.105	2.40	2.70	C	0.018	0.024	0.46	0.60
B	0.018	0.024	0.46	0.60	D	0.190	0.205	4.8	5.2

Notes : 1.Controlling dimension : millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.