

# 10ELS1 ~ 10ELS6

# FAST RECOVERY DIODE

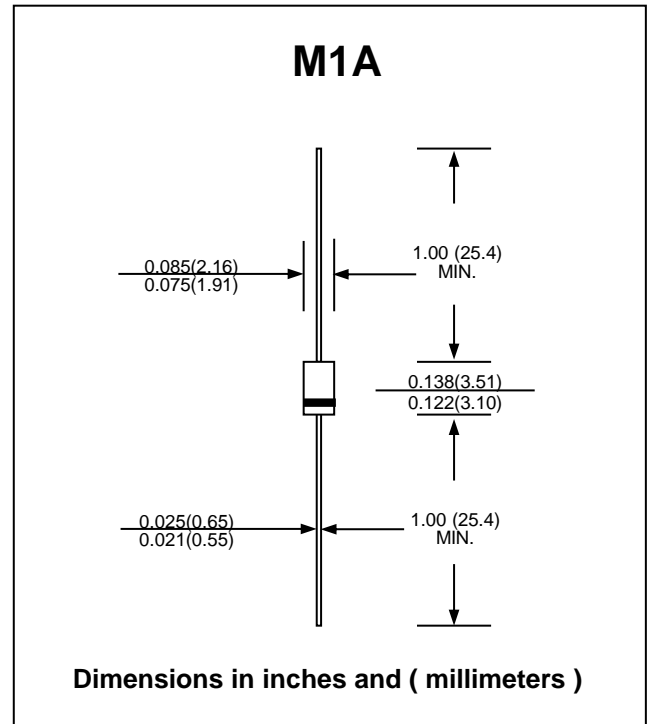
**PRV : 100 ~ 400 Volts**  
**Io : 1.0 Amperes**

### FEATURES :

- \* Glass passivated junction chip
- \* High current capability
- \* High surge current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop
- \* Fast switching for high efficiency
- \* **Pb / RoHS Free**

### MECHANICAL DATA :

- \* Case : M1A Molded plastic
- \* Epoxy : UL94V-0 rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.20 gram (approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

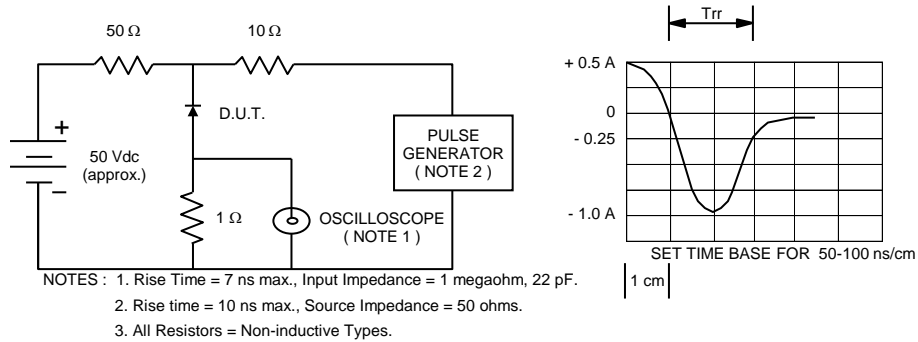
RATING	SYMBOL	10ELS1	10ELS2	10ELS4	10ELS6	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	100	200	400	600	V
Maximum RMS Voltage	VRMS	70	140	210	280	V
Maximum DC Blocking Voltage	VDC	100	200	400	600	V
Maximum Average Forward Current	IF(AV)	1.0				A
Maximum Peak Forward Surge Current, 8.3ms Single half sine wave	IFSM	30				A
Maximum Peak Forward Voltage at IF = 1.0 A	VF	1.1	1.15		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	IRM	10				μA
Maximum Reverse Recovery Time ( Note 1 )	Trr	150				ns
Junction Temperature Range	TJ	- 65 to + 150				°C
Storage Temperature Range	TSTG	- 65 to + 150				°C

### Note :

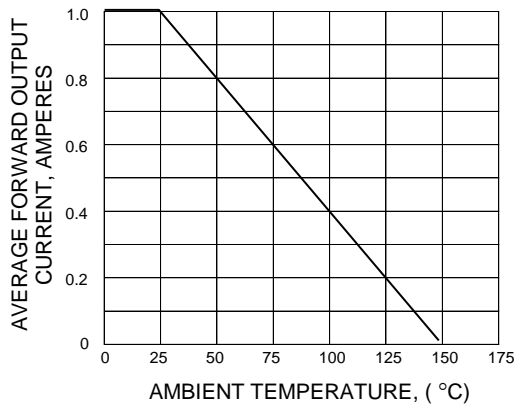
( 1 ) Reverse Recovery Test Conditions : IF = 0.5 A, IR = 1.0 A, Irr = 0.25 A.

## RATING AND CHARACTERISTIC CURVES ( 10ELS1 ~ 10ELS6 )

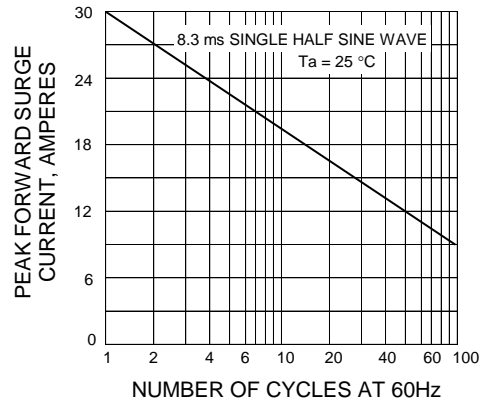
**FIG.1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM**



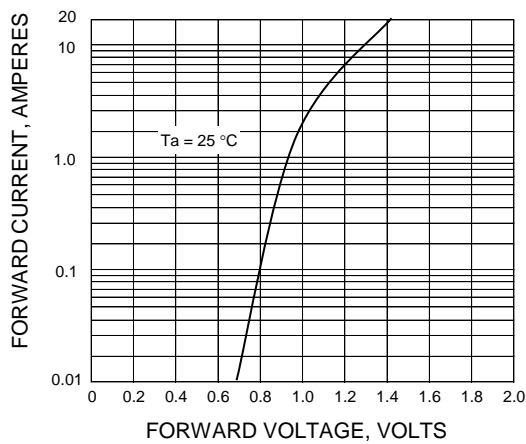
**FIG.2 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



**FIG.3 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.4 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.5 - TYPICAL REVERSE CHARACTERISTICS**

