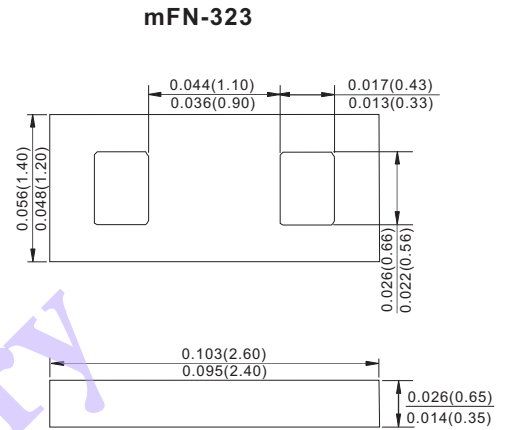


### Features

- Low profile surface mounted application in order to optimize board space.
- mini Flat No-Lead Package.
- Glass passivated chip junction.
- **Pb-Free package is available**  
 RoHS product for packing code suffix "G"  
 Halogen free product for packing code suffix "H"
- **Polarity:** Color band denotes cathode end

### Package outline



Dimensions in inches and (millimeters)

### Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : mFN-323
- Mounting Position : Any

### Maximum ratings and Electrical Characteristics (AT T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I <sub>o</sub>			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I <sub>FSM</sub>			30	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>J</sub> = 25°C	I <sub>R</sub>			5.0	μA
Typical Diode junction capacitance	f=1MHz and applied 4V DC reverse voltage	C <sub>J</sub>		25		pF
Storage temperature		T <sub>STG</sub>	-65		+175	°C

SYMBOLS	V <sub>RRM</sub> <sup>*1</sup> (V)	V <sub>RMS</sub> <sup>*2</sup> (V)	V <sub>R</sub> <sup>*3</sup> (V)	V <sub>F</sub> <sup>*4</sup> (V)	t <sub>rr</sub> <sup>*5</sup> (ns)	Operating temperature T <sub>J</sub> , (°C)
MURS160-FN3	600	420	600	1.25	50	-55 to +150

Note 1. Reverse recovery time test condition, I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A

\*1 Maximun Repetitive peak reverse voltage

\*2 Maximun RMS voltage

\*3 Maximun DC Blocking Voltage

\*4 Maximum forward voltage@I<sub>F</sub>=1.0A, T<sub>J</sub>=25°C

\*5 Maximum Reverse recovery time, note 1



### Rating and characteristic curves

FIG.1-TYPICAL FORWARD CHARACTERISTICS

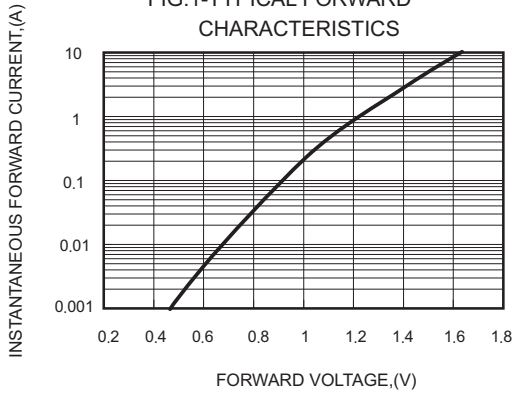


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

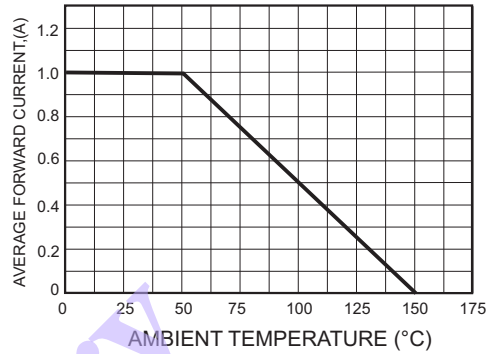


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

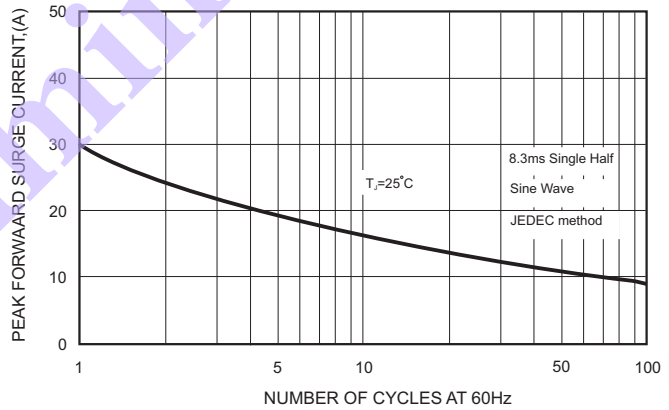
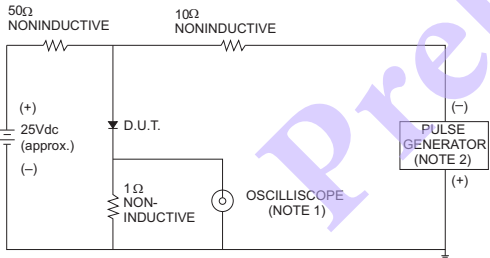


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

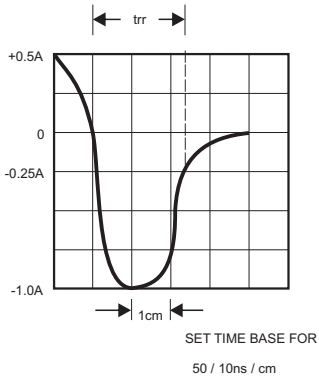
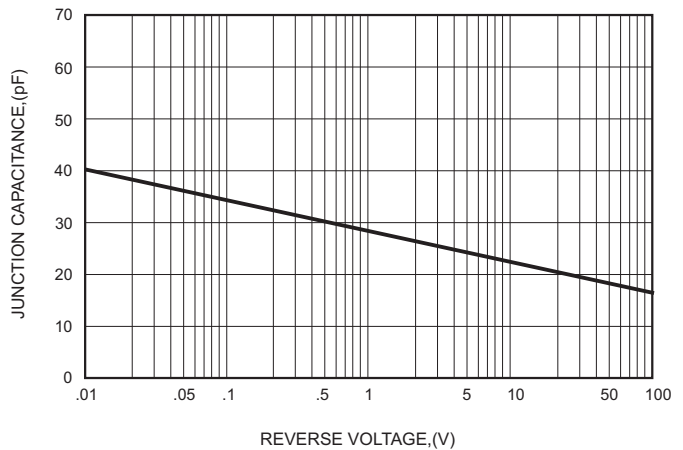


FIG.5-TYPICAL JUNCTION CAPACITANCE



**1.0A SURFACE MOUNT ULTRA FAST RECTIFIERS - 600V**  
**mFN-323 PACKAGE**

**Pinning information**

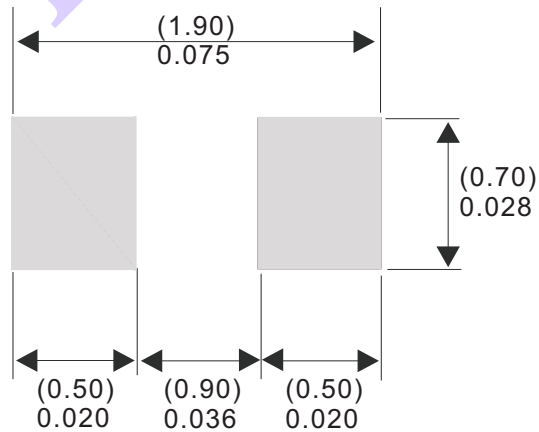
Pin	Simplified outline	Symbol
Pin1 cathode Pin2 anode		

**Marking**

Type number	Marking code
MURS160-FN3	M6

**Suggested solder pad layout**

Preliminary



Dimensions in inches and (millimeters)