

TO-277 Plastic-Encapsulate Diodes

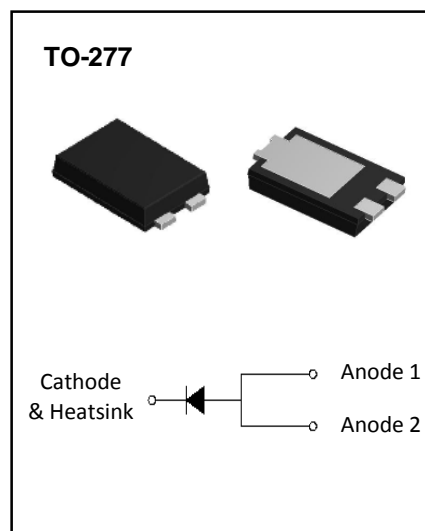
10 Amp Ultra Fast Rectifiers

Features

- I_o 10A
- V_{RRM} 50V-600V
- High surge current capability

Applications

- Rectifier



Maximum Ratings And Electrical Characteristics

Parameter	SYMBOLS	MUR							UNITS
		1005	1010	1015	1020	1030	1040	1060	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	V
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	V
Maximum average forward rectified current at $T_L=100^\circ C$	$I_{(AV)}$	10.0							A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150.0							A
Maximum instantaneous forward voltage at 10.0A	V_F	1.0			1.3		1.7		V
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ C$ $T_A=125^\circ C$	I_R	5.0			500				μA
Maximum reverse recovery time(Note 1)	T_{Tr}	35			50				ns
Typical junction capacitance (Note2)	C_J	140.0							pF
Typical thermal resistance	R_{qJA}	47.0							$^\circ C/W$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^\circ C$

Note: 1.Reverse recovery time test condition: $I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$
 2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Typical Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

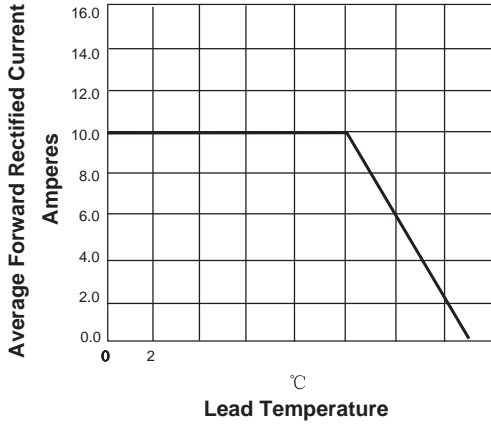


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

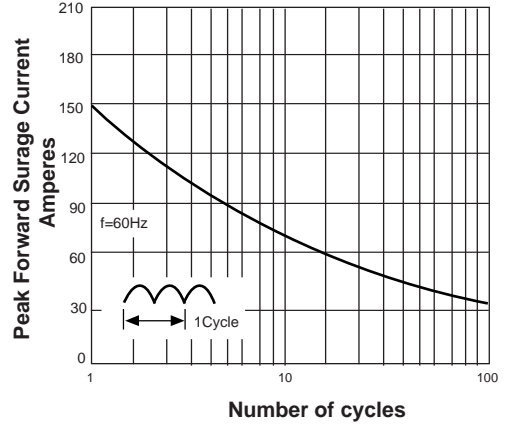


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

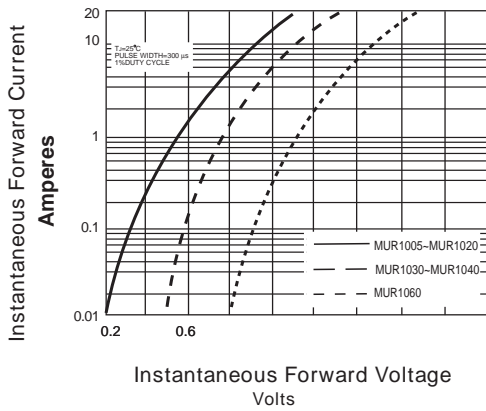
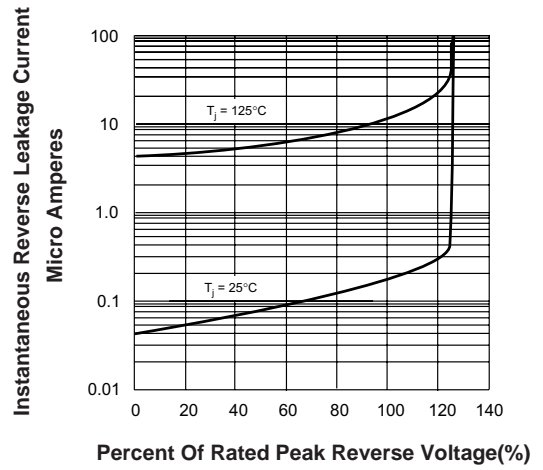
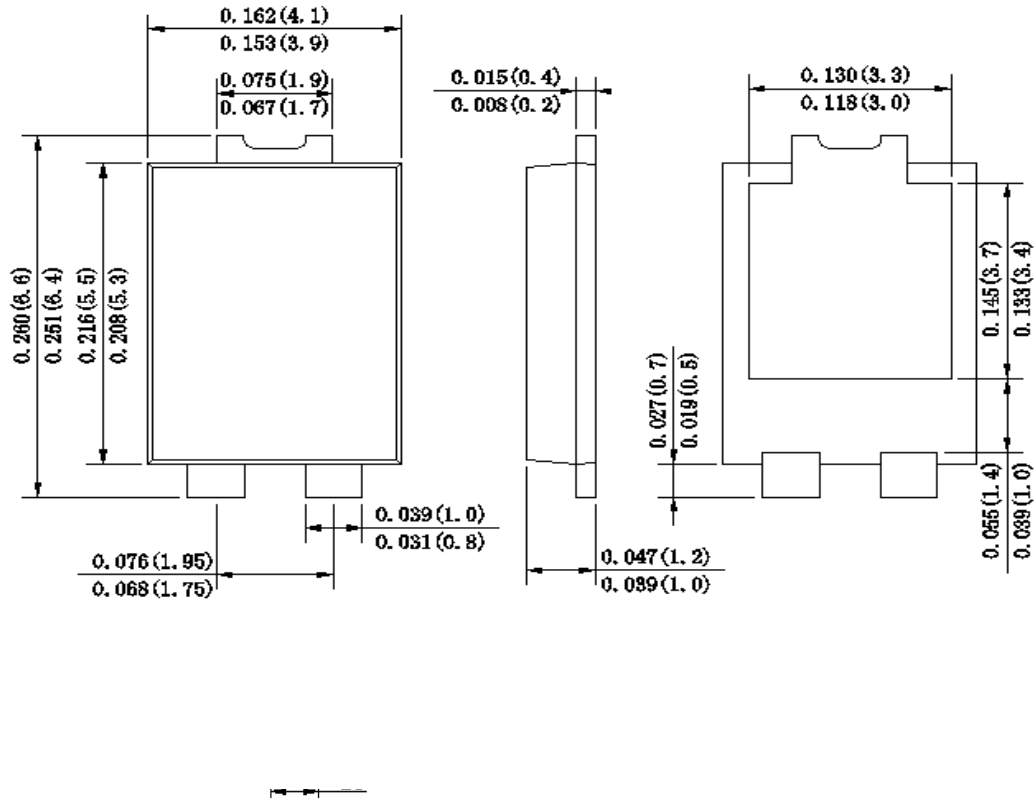


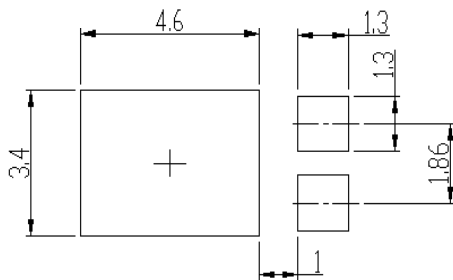
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



TO-277 Package Outline Dimensions



TO-277 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

NOTICE

JSJD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSJD does not assume any liability arising out of the application or use of any product described herein.