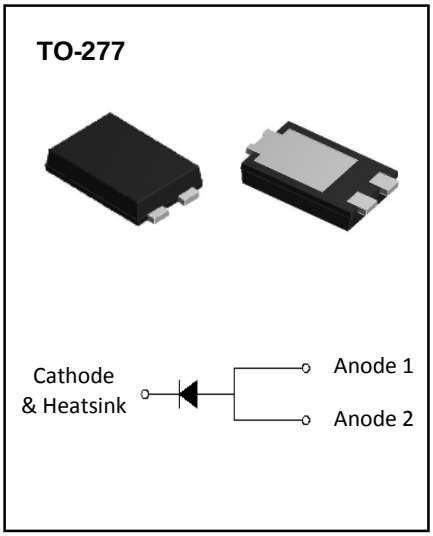
MUR510~MUR560

TO-277 Plastic-Encapsulate Diodes

5.0Amp Ultra Fast Rectifiers

Features

- I_O 5A
- VRRM 100V-600V
- High surge current capability



Applications

- Rectifier

Maximum Ratings And Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	MUR510	MUR520	MUR540	MUR560	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	V
Maximum average forward rectified current at T_L=100℃	$I_{(AV)}$	5.0				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 5.0A	V_F	1.0		1.3		V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	2.0 200				u A
Maxinum reverse recovery time(Note 1)	Trr	35		50		ns
Typical junction capacitance (Note2)	C_J	80.0				pF
Typical thermal resistance	R_{qJA}	60.0				°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150				℃

Note: 1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Typical Characteristics

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

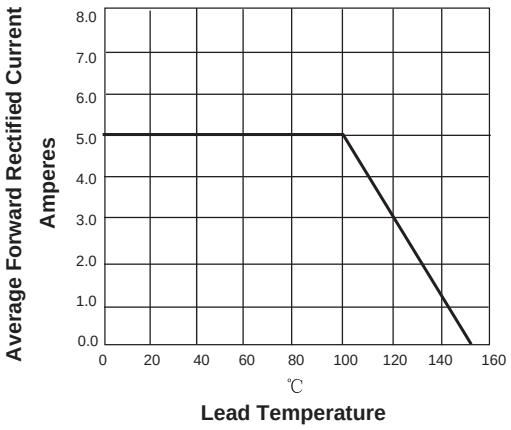


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

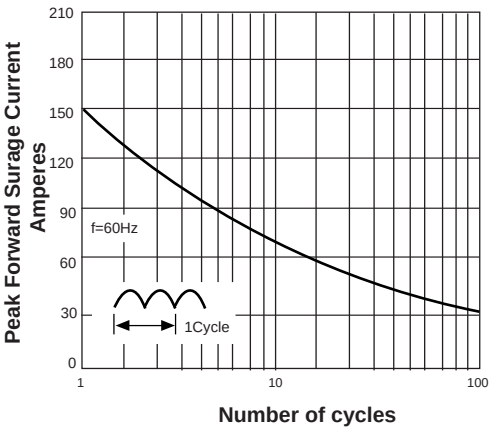


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

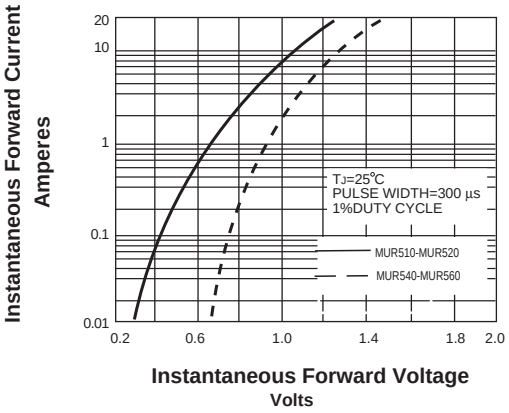
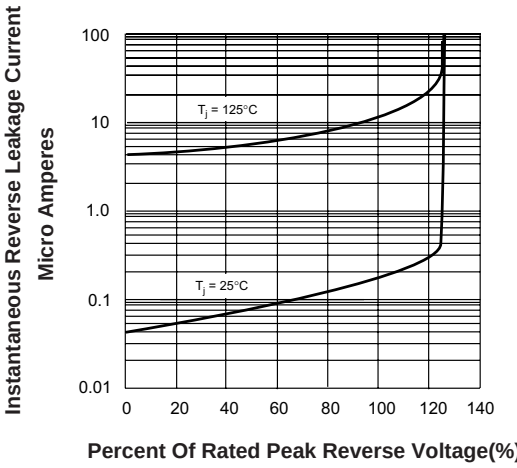
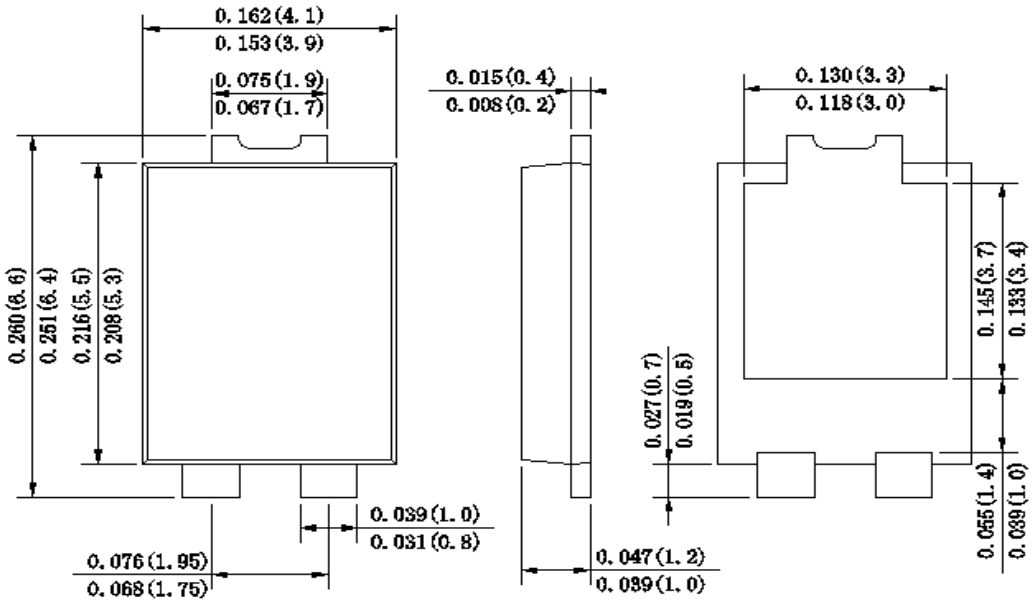


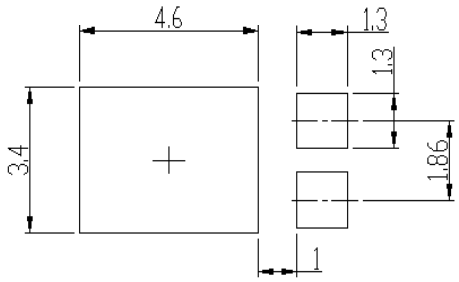
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS



TO- 277 Package Outline Dimensions



TO- 277 Suggested Pad Layout



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

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