

MUR410-MUR4100 4.0Amp Ultra Fast Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low reverse leakage
- High forward surge current capability
- Low forward voltage,high efficiency.
- For use in low voltage,high frequency inverters.
- Dual rectifier consruction,positive center tap.
- High temperature soldering guaranteed:
260°C/10 seconds,0.375"(9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

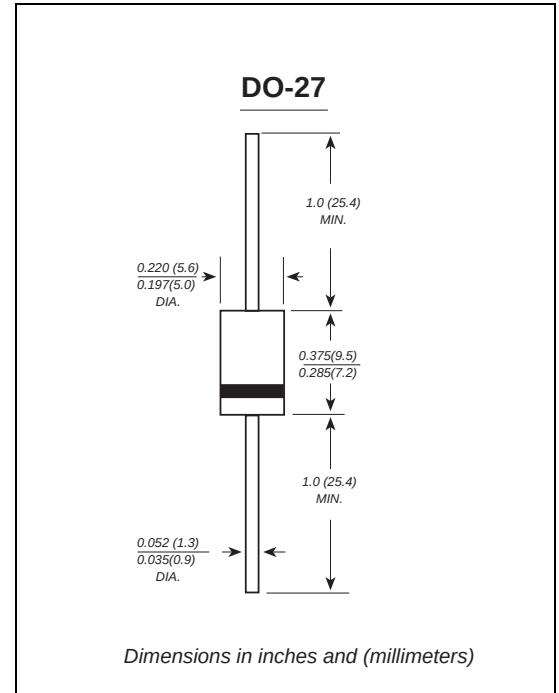
Case: JEDEC DO-27 molded plastic body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.04 ounce, 1.10 grams



Maximum Ratings And Electrical Characteristics

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

	SYMBOLS	MUR410	MUR420	MUR440	MUR460	MUR480	MUR4100	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	VOLTS
Maximum average forward rectified current at $T_L=60^{\circ}C$	$I_{(AV)}$	4.0						Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125						Amps
Maximum instantaneous forward voltage at 4.0A	V_F	0.95		1.28		1.85		Volts
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	10.0 500.0						μA
Maximum reverse recovery time (NOTE 1)	t_{rr}	45		60		75		nS
Typical junction capacitance (Note 2)	C_J	50						pF
Typical thermal resistance	R_{qJA}	50						$^{\circ}C/W$
Storage temperature range & Operating junction	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.

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Ratings And Characteristic Curves

MUR410 THRU MBR4100

FIG. 1- FORWARD CURRENT DERATING CURVE

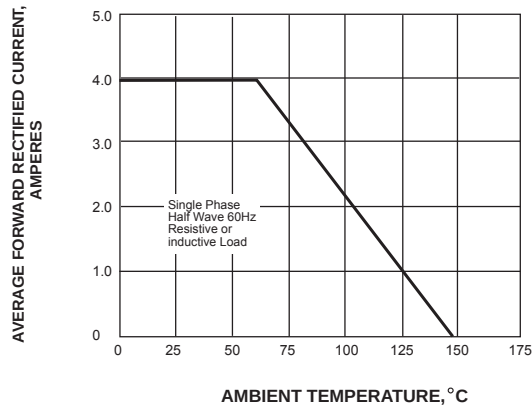


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

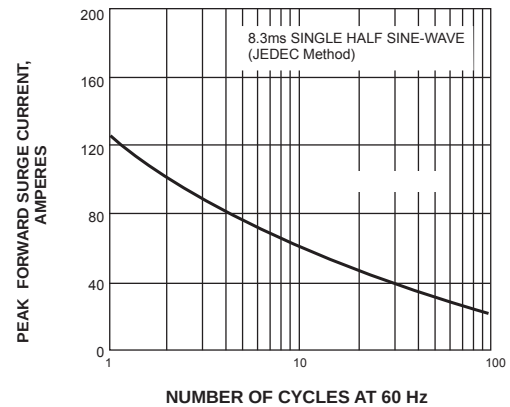


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

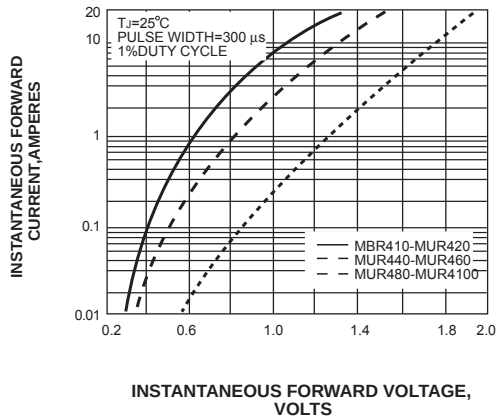


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

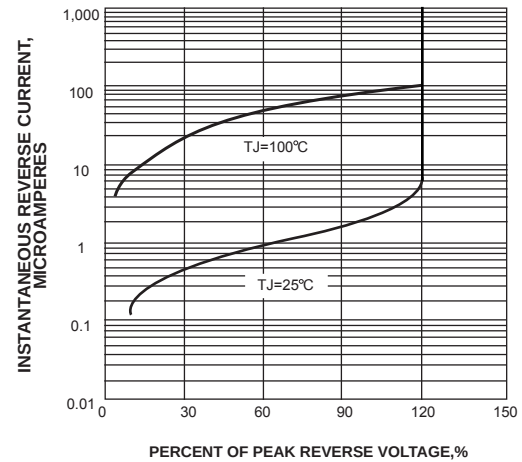


FIG. 5-TYPICAL JUNCTION CAPACITANCE

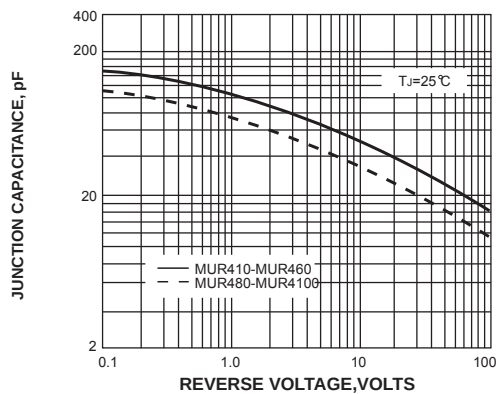


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

