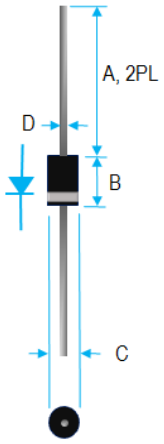
MUR405 THRU MUR4100 SPECIFICATIONS

Rev. A

4A ULTRA FAST RECTIFIER



Dim.	Value Inch[mm]	
	Min.	Max.
A	1.000[25.40]	---
B	0.335[8.51]	0.375[9.52]
C	0.197[5.00]	0.220[5.59]
D	0.048[1.22]	0.052[1.32]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. GLASS PASSIVATED CHIP JUNCTION
3. LOW LEAKAGE
4. LOW FORWARD VOLTAGE DROP
5. HIGH SURGE CURRENT CAPABILITY
6. ULTRA FAST SWITCHING
7. LOW LOSSES
8. CASE: MOLDED PLASTIC, DO-201AD
9. POLARITY: INDICATED BY CATHODE BAND
10. WEIGHT: 1.2 GRAMS
11. LEADS: SOLDERABILITY PER MIL-STD-202 METHOD 208
12. RoHS

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED STORAGE AND OPERATING TEMPERATURE RANGE -55°C TO +150°C. SINGLE PHASE, HALF WAVE, 60 HZ, RESISTIVE OR INDUCTIVE LOAD. FOR CAPACITIVE LOAD, DERATE CURRENT BY 20%.

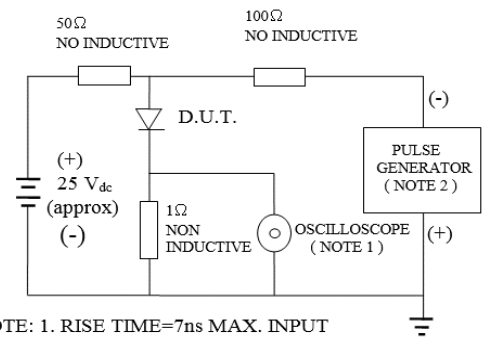
RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375"(9.5mm) LEAD LENGTH @ TA=55°C	I_O	4.0	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	C_J	70	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	50	℃/W
MAXIMUM REVERSE CURRENT @ 25℃	I_R	10	uA
MAXIMUM REVERSE CURRENT @ 100℃	I_R	100	uA

1. C_j MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 20×20×1 T (mm) COPPER PLATE @ LEAD LENGTH 5mm
3. REVERSE RECOVERY TEST CONDITIONS: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A
4. MAXIMUM FORWARD VOLTAGE @ I_o DC

PART NUMBER	MAX RECURRENT PEAK REV VOLTAGE V_{RRM} (V)	MAX RMS VOLTAGE V_{RMS} (V)	MAX DC BLOCKING VOLTAGE V_{DC} (V)	MAX FWD VOLTAGE V_F (V)	MAX REVERSE RECOVERY TIME T_{RR} (nS)
MUR405	50	35	50	0.92	50
MUR410	100	70	100	0.92	50
MUR415	150	105	150	0.92	50
MUR420	200	140	200	0.92	50
MUR440	400	280	400	1.25	50
MUR460	600	480	600	1.25	50
MUR480	800	560	800	1.85	75
MUR4100	1000	700	1000	1.85	75

RATING AND CHARACTERISTIC CURVES

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



NOTE: 1. RISE TIME=7ns MAX. INPUT IMPEDANCE=1 MOhms 22PF
2. RISE TIME =10ns MAX. SOURCE IMPEDANCE=50 OHMS

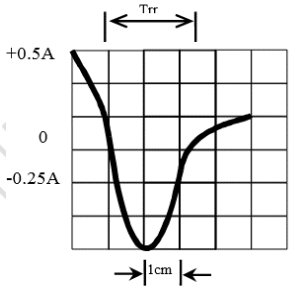


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

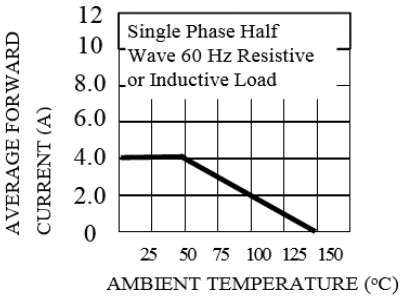


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

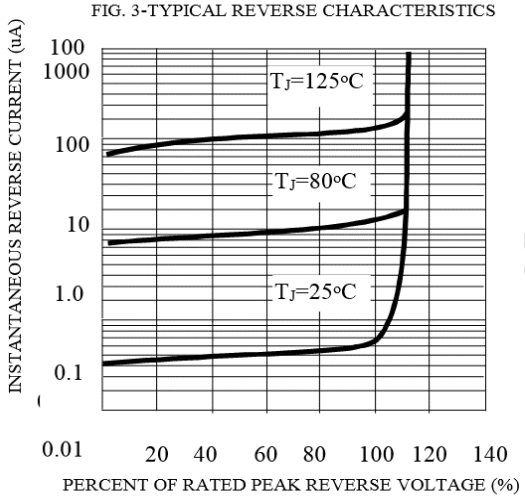


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

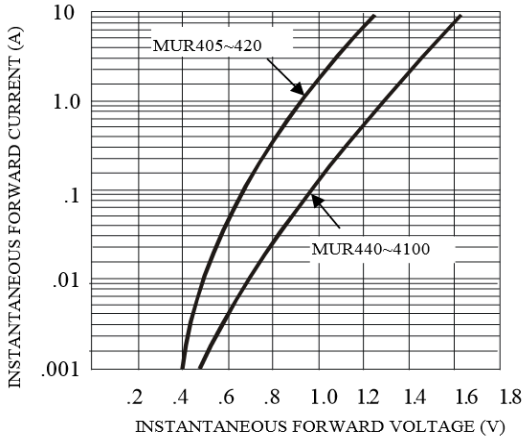


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

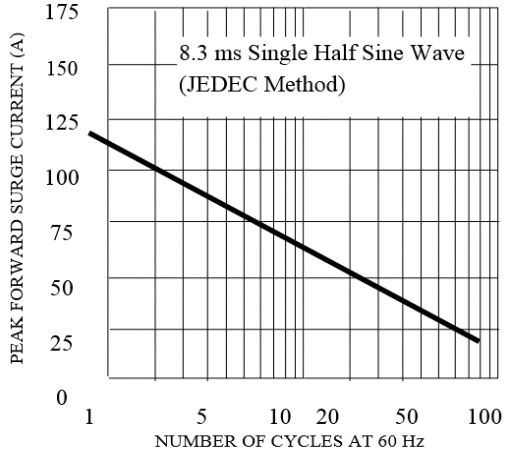


FIG. 6-TYPICAL JUNCTION CAPACITANCE