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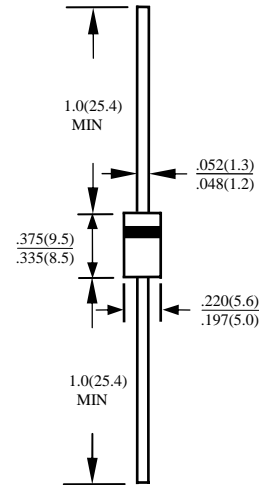
4A FAST EFFICIENT RECTIFIER MUR405-LFR THRU MUR4100-LFR

FEATURES

- LOW POWER LOSS, HIGH EFFICIENCY
- LOW LEAKAGE
- LOW FORWARD VOLTAGE DROP
- HIGH CURRENT CAPABILITY
- HIGH SPEED SWITCHING
- HIGH RELIABILITY
- HIGH CURRENT SURGE
- GLASS PASSIVATED CHIP JUNCTION
- ROHS

MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO201AD, DIMENSIONS IN INCHES AND (MILLIMETERS)
- EPOXY: UL 94V-0 RATE FLAME RETARDANT
- LEAD: MIL-STD-202E METHOD 208C GUARANTEED
- MOUNTING POSITION: ANY
- WEIGHT: 1.20 GRAMS



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

RATINGS	SYMBOL	MUR 405 -LFR	MUR 410 -LFR	MUR 415 -LFR	MUR 420 -LFR	MUR 440 -LFR	MUR 460 -LFR	MUR 480 -LFR	MUR 4100 -LFR	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	50	100	150	200	400	600	800	1000	V
MAXIMUM RMS VOLTAGE	V_{RMS}	35	70	105	140	280	480	560	700	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	50	100	150	200	400	600	800	1000	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375" (9.5mm) LEAD LENGTH AT TA=55°C	I_O	4.0								A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	I_{FSM}	125				70				A
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	C_J	70								PF
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta ja}$	50								°C/W
STORAGE TEMPERATURE RANGE	T_{STG}	- 55 TO + 150								°C
OPERATING TEMPERATURE RANGE	T_{OP}	- 55 TO + 150								°C

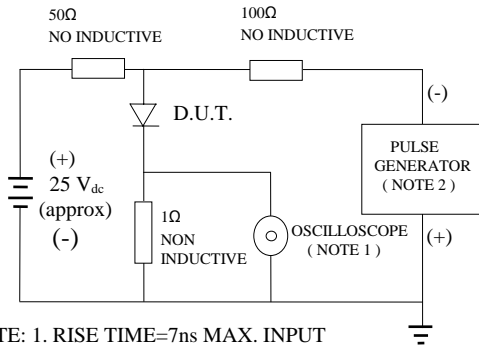
ELECTRICAL CHARACTERISTICS (A_T T_A =25°C UNLESS OTHERWISE NOTED)

CHARACTERISTICS	SYMBOL	MUR 405 -LFR	MUR 410 -LFR	MUR 415 -LFR	MUR 420 -LFR	MUR 440 -LFR	MUR 460 -LFR	MUR 480 -LFR	MUR 4100 -LFR	UNITS	
MAXIMUM FORWARD VOLTAGE AT I _O DC	V_F	0.92			1.25		1.85			V	
MAXIMUM REVERSE CURRENT AT 25°C	I_R	5			10						μA
MAXIMUM REVERSE CURRENT AT 100°C	I_R	100									μA
MAXIMUM REVERSE RECOVERY TIME (NOTE 3)	T_{RR}	25			50		75			nS	

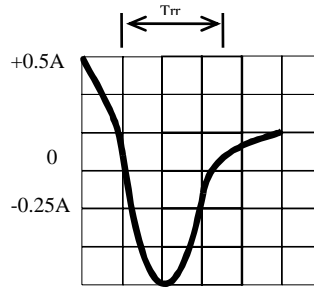
- NOTE:
1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
 2. BOTH LEADS ATTACHED TO HEAT SINK 20x20x1t(mm) COPPER PLATE AT LEAD LENGTH 5mm
 3. REVERSE RECOVERY TEST CONDITIONS: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

RATINGS AND CHARACTERISTIC CURVE MUR405-LFR THRU MUR4100-LFR

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



SET TIME BASE FOR 10/20 ns/cm

FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

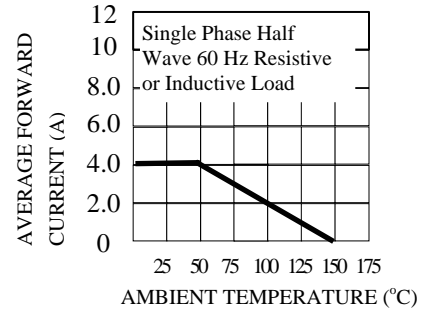


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

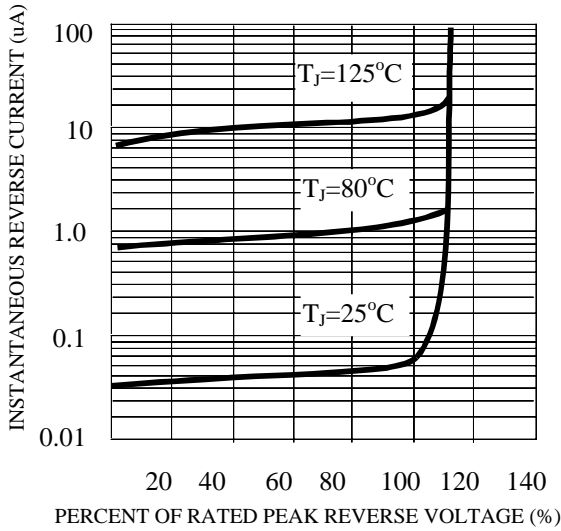


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

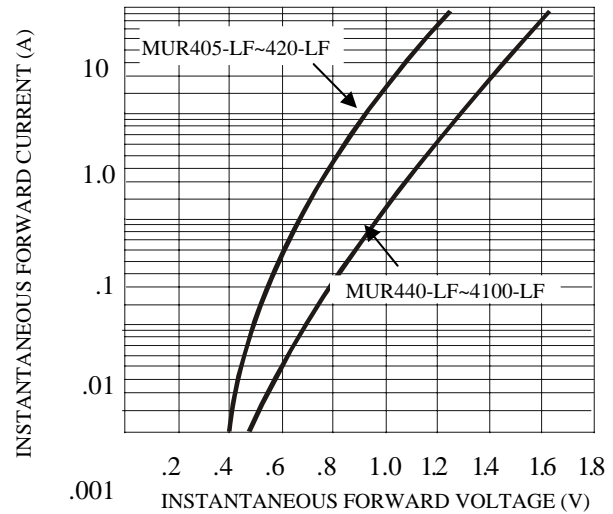


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

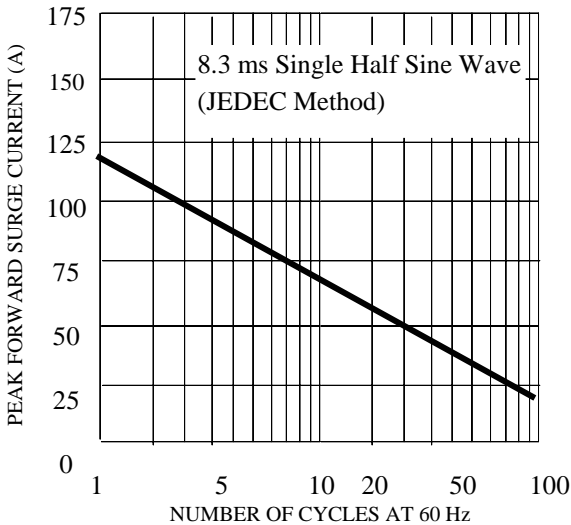


FIG. 6-TYPICAL JUNCTION CAPACITANCE

