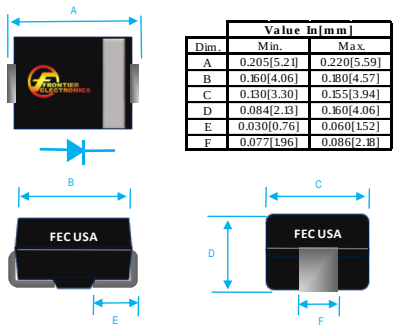
MURS305 THRU MURS360 SPECIFICATIONS

Rev. A

3A ULTRA FAST RECOVERY SURFACE MOUNT RECTIFIER



Dim.	Value In[mm] Min.	Max.
A	0.205[5.21]	0.220[5.59]
B	0.160[4.06]	0.180[4.57]
C	0.130[3.30]	0.155[3.94]
D	0.084[2.13]	0.160[4.06]
E	0.030[0.76]	0.060[152]
F	0.077[196]	0.086[2.18]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. GLASS PASSIVATED CHIP JUNCTION
3. BUILT-IN STRAIN RELIEF
4. LOW PROFILE
5. ULTRA FAST SWITCHING
6. CASE: MOLDED PLASTIC, DO-214AA (SMB-F)
7. POLARITY: INDICATED BY CATHODE BAND
8. WEIGHT : 0.093 GRAMS
9. 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%

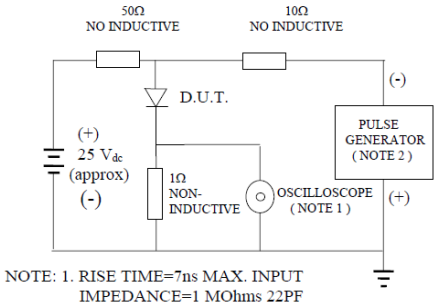
RATINGS	SYMBOL	VALUE	UNITS
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT 0.375"(9.5mm) LEAD LENGTH @ TA=55°C	IO	3	A
PEAK FWD SURGE CURRENT, 8.3ms HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	IFSM	75	A
TYPICAL JUNCTION CAPACITANCE(NOTE1)	CJ	10	pF
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	13	℃/W
MAXIMUM REVERSE CURRENT @ 125 ℃	IR	250	uA

1. Cj MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE 0F 4.0 VOLTS
2. THERMAL RESISTANCE FROM JUNCTION TO AMBIENT AND JUNCTION TO LEAD PCB MOUNTED ON 0.3×0.3"(8.0×8.0mm) COPPER PAD AREAS
3. REVERSE RECOVERY TEST CONDITIONS: IF=0.5A, IR=1.0A, IRR=0.25A
4. MAXIMUM FORWARD VOLTAGE @ Io DC

PART NUMBER	MAX RECURRENT PK REV VOLTAGE VRRM (V)	MAX RMS VOLTAGE VRMS (V)	MAX DC BLOCKING VOLTAGE VDC (V)	MAX FWD VOLTAGE VF (V)	MAX REV CURRENT AT 25°C IR (uA)	MAX REVERSE RECOVERY TIME nS
MURS305	50	35	50	0.875	2	25
MURS310	100	70	100	0.875	2	25
MURS315	150	105	150	0.875	2	25
MURS320	200	140	200	0.875	2	25
MURS340	400	280	400	1.25	5	50
MURS360	600	420	600	1.25	5	50

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

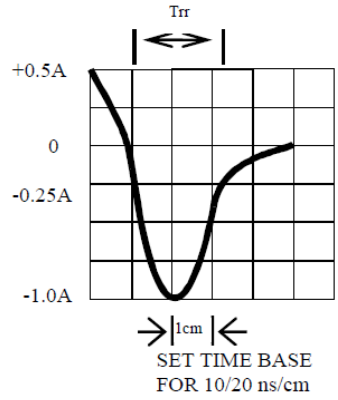


FIG. 2-TYPICAL FORWARD CURRENT DERATING CURVE

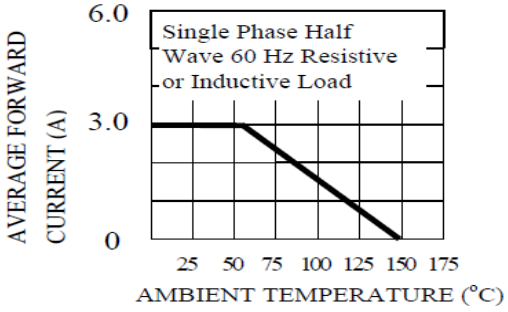


FIG. 3-TYPICAL REVERSE CHARACTERISTICS

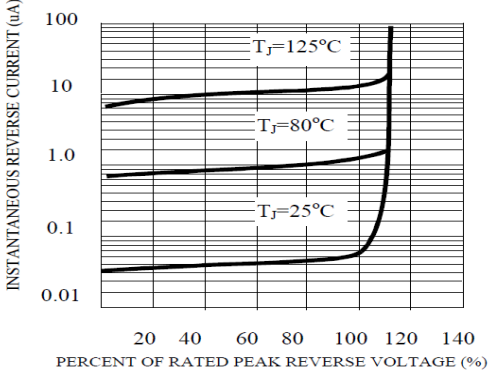


FIG. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

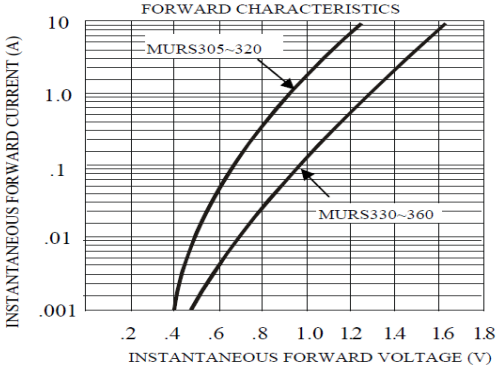


FIG. 5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

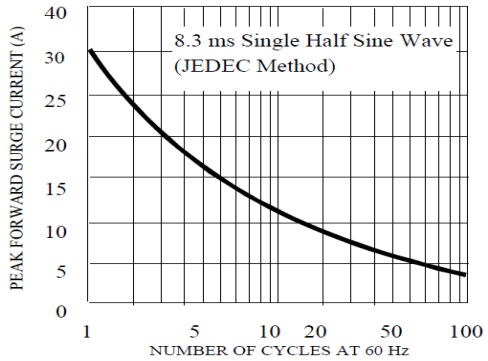


FIG. 6-TYPICAL JUNCTION CAPACITANCE