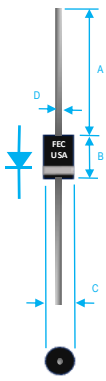


3A ULTRA FAST RECOVERY RECTIFIER



Dim.	Value in [mm]	
	Min.	Max.
A	1.000[25.40]	—
B	0.335[8.51]	0.375[9.52]
C	0.297[5.00]	0.220[5.59]
D	0.048[1.22]	0.052[1.32]

PRODUCT FEATURES

1. FLAMMABILITY CLASSIFICATION: 94V-0
2. DIFFUSED JUNCTION
3. HIGH SURGE CURRENT CAPABILITY
4. BEVELED ROUND CHIP, AVALANCHE OPERATION
5. CASE: MOLDED PLASTIC, DO201AD
6. POLARITY: INDICATED BY CATHODE BAND
7. WEIGHT : 1.2 GRAMS
8. TERMINALS : PER MIL-STD-202, METHOD 208
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	150	A
TYPICAL THERMAL RESISTANCE (NOTE 2)	Rqja	20	°C/W
MAXIMUM FORWARD VOLTAGE AT IO DC	VF	1.4	V
MAXIMUM REVERSE CURRENT @ 25°C	IR	5	uA
MAXIMUM REVERSE CURRENT @ 100°C	IR	50	uA
MAXIMUM REVERSE RECOVERY TIME	TRR	100	nS

1. Cj MEASURED @ 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS
2. BOTH LEADS ATTACHED TO HEAT SINK 63.5x63.5x1t(mm) COPPER PLATE @ LEAD LENGTH 5mm
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)	TYPICAL JUNCTION CAP CJ (PF)
BYT56A	50	35	50	75
BYT56B	100	70	100	75
BYT56D	200	140	200	75
BYT56G	400	280	400	75
BYT56J	600	420	600	50
BYT56K	800	560	800	50
BYT56M	1000	700	1000	50

RATING AND CHARACTERISTIC CURVES

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

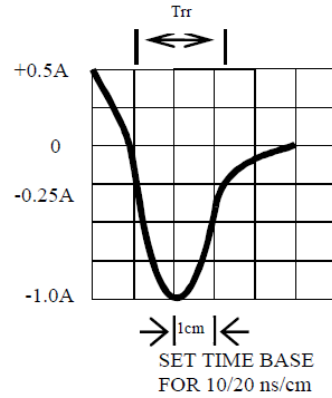
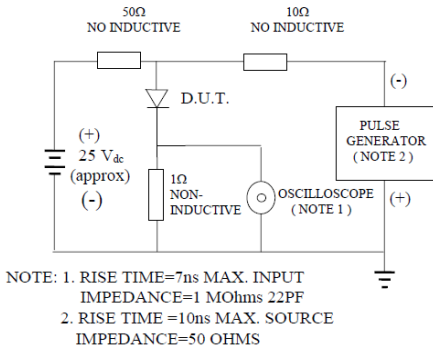


FIG. 2 -TYPICAL FORWARD CURRENT DERATING CURVE

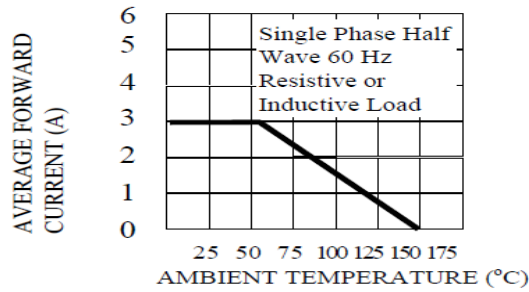


FIG. 3 -TYPICAL REVERSE CHARACTERISTICS

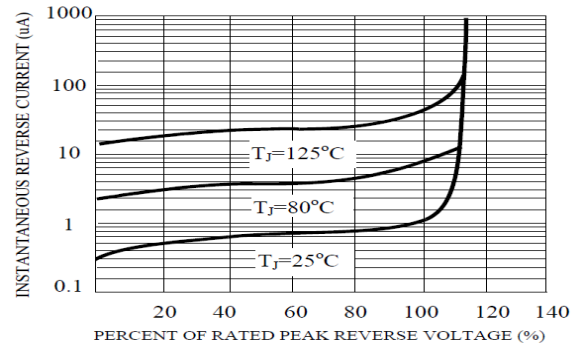


FIG. 4 -TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

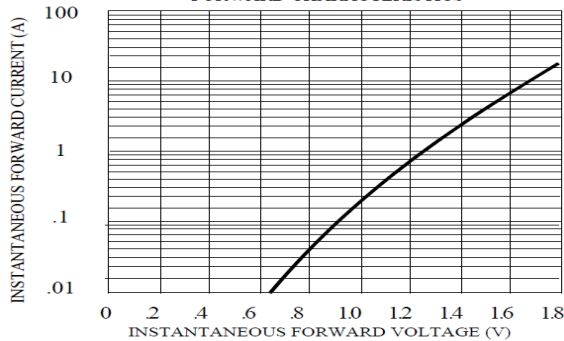
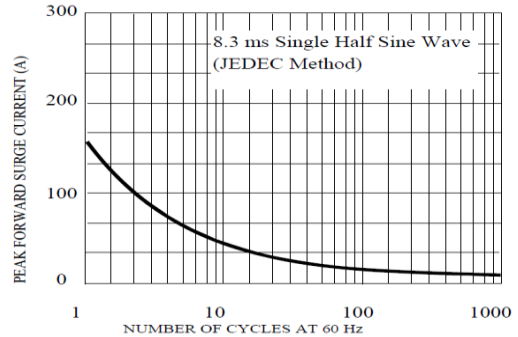


FIG. 5 -MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT





BYT56A THRU BYT56M SPECIFICATIONS

Rev. A

FIG. 6 -TYPICAL JUNCTION CAPACITANCE

