

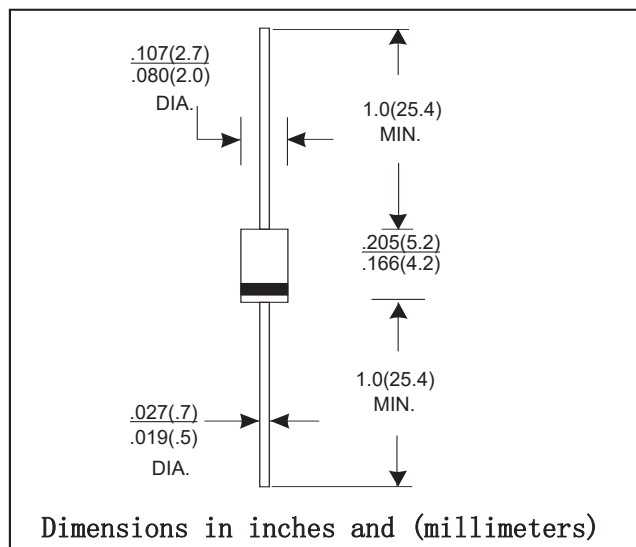
DO-41 FAST RECOVERY RECTIFIERS

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High reliability
- High temperature soldering guaranteed:260 °C/10 seconds at terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case style: DO-41 molded plastic
- Mounting position: Any



MAXIMUM RATINGS AND CHARACTERISTICS

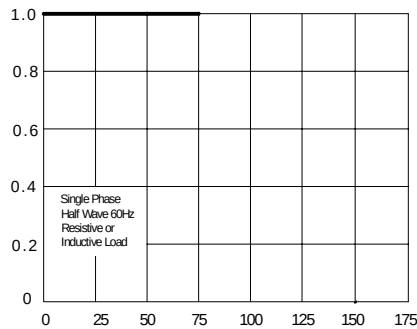
@ 25°C Ambient Temperature (unless otherwise noted)

TYPE NUMBER	Symbols	Units	BA157	BA158	BA159
Maximum repetitive peak reverse voltage	V _{RRM}	V	400	600	1000
Maximum RMS voltage	V _{RMS}	V	280	420	700
Maximum DC blocking voltage	V _{DC}	V	400	600	1000
Maximum average forward rectified current 9.5mm lead length at TA=55°C	I _{F(AV)}	A	1.0		
Peak Forward Surge Current,8.3ms single half-wave superimposed on rated load (JEDEC method)	I _{FSM}	A	30		
Operating junction temperature range	T _J	°C	-55to+125		
Storage temperature range	T _{stg}	°C	-55to+150		
Maximum instantaneous forward voltage at1.0A	V _F	V	1.3Max.		
Maximum DC reverse current at rated DC blocking voltage Ta=25°C Ta=100°C	I _{R1}	μA	5.0Max.		
	I _{R2}	μA	100.0Max		
Maximum reverse recovery time (test conditions:IF=0.5A,IR=1.0A,IRR=0.25A)	T _{rr}	nS	300		

RATINGS AND CHARACTERISTIC CURVES

FIG.1 – FORWARD CURRENT DERATING CURVE

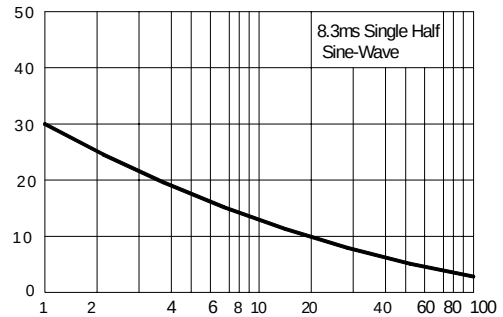
AVERAGE FORWARD RECTIFIED
CURRENT, AMPERES



LEAD TEMPERATURE, °C

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

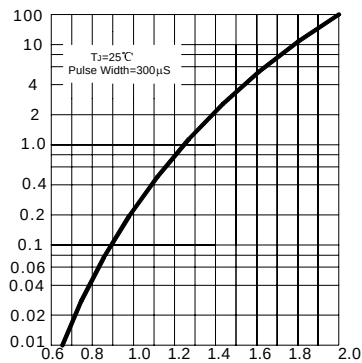
PEAK FORWARD SURGE CURRENT
AMPERES



NUMBER OF CYCLES AT 60Hz

FIG.3 --TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

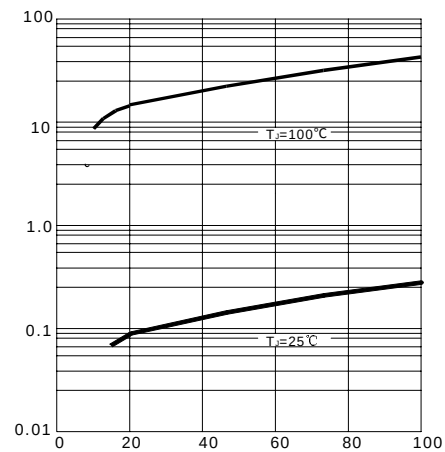
INSTANTANEOUS FORWARD CURRENT
AMPERES



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

FIG.4-TYPICAL REVERSE CHARACTERISTICS

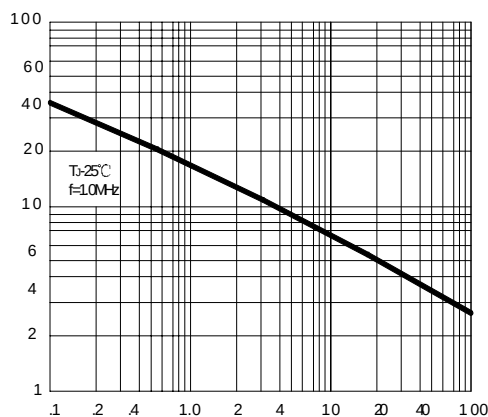
INSTANTANEOUS REVERSE LEAKAGE
CURRENT, MICROAMPERES



PERCENT OF RATED PEAK REVERSE VOLTAGE, %

FIG.5-TYPICAL JUNCTION CAPACITANCE

JUNCTION CAPACITANCE, pF



REVERSE VOLTAGE, VOLTS