Frontier Electronics Corp.

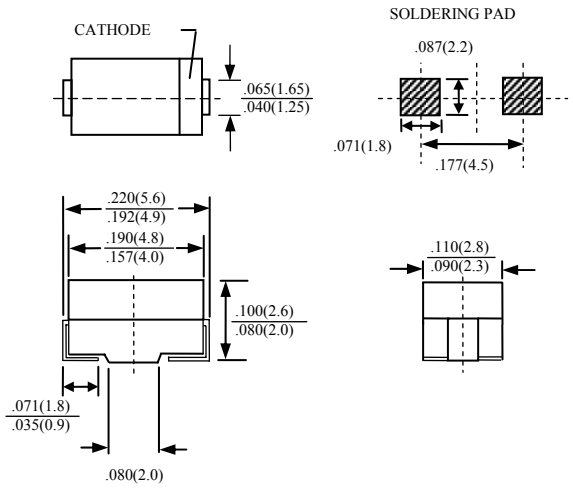
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2A SURFACE MOUNT LOW FORWARD VOLTAGE SCHOTTKY BARRIER RECTIFIERS

LS22A THRU LS24A

FEATURES

- FOR SURFACE MOUNTED APPLICATIONS
- LOW FORWARD VOLTAGE
- LOW PROFILE PACKAGE
- BUILT-IN STRAIN RELIEF
- EASY PICK AND PLACE
- PLASTIC MATERIAL USED CARRIES UNDERWRITERS LABORATORY CLASSIFICATION 94 V-0
- EXTREMELY LOW VF
- MAJORITY CARRIER CONDUCTION
- HIGH TEMPERATURE SOLDERING: 250°C/10 SECONDS AT TERMINALS



MECHANICAL DATA

- CASE: MOLDED PLASTIC, DO-214AC (SMA), DIMENSIONS IN INCHES AND (MILLIMETERS)
- TERMINALS: SOLDER PLATED
- POLARITY: INDICATED BY CATHODE BAND
- WEIGHT: 0.064 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	LS22A	LS23A	LS24A	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	V_{RRM}	20	30	40	V
MAXIMUM RMS VOLTAGE	V_{RMS}	14	21	28	V
MAXIMUM DC BLOCKING VOLTAGE	V_{DC}	20	30	40	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT SEE FIG.1 (NOTE 1)	I_O	2.0			A
MAXIMUM OVERLOAD SURGE 8.3ms SINGLE HALF SINE-WAVE	I_{FSM}	50			A
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jL}$	17			℃/W
TYPICAL THERMAL RESISTANCE (NOTE 2)	$R_{\theta jA}$	75			℃/W
STORAGE TEMPERATURE RANGE	T_{STG}	-55 TO + 150			℃
OPERATING TEMPERATURE RANGE	T_{OP}	-55 TO + 125			℃

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

CHARACTERISTICS	SYMBOL	LS22A	LS23A	LS24A	UNITS
MAXIMUM FORWARD VOLTAGE AT 2.0A AND 25℃(NOTE 1)	V_F	0.45			V
MAXIMUM REVERSE CURRENT AT 25℃(NOTE 1)	I_R	1			mA
MAXIMUM REVERSE CURRENT AT 100℃(NOTE 1)	I_R	20.0			mA

NOTE: 1. PULSE TEST : 300μS PULSE WIDTH , 1% DUTY CYCLE
2. P.C.B. MOUNTED 0.55"×0.55 "(14×14 mm) 0.013mm THICK COPPER PAD AREAS

RATINGS AND CHARACTERISTIC CURVE LS22A THRU LS24A

FIG. 1 - FORWARD CURRENT DERATING CURVE

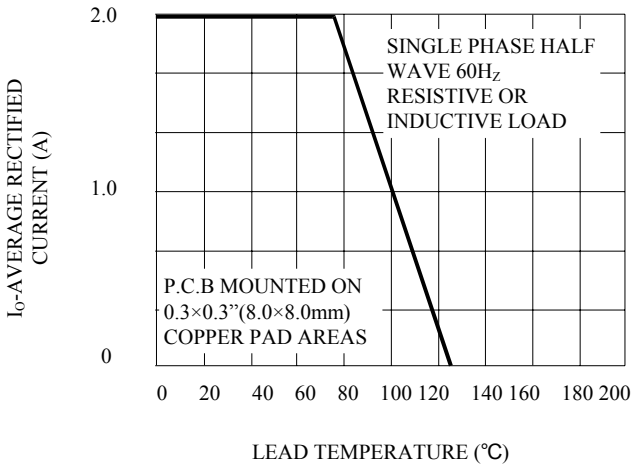


FIG.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

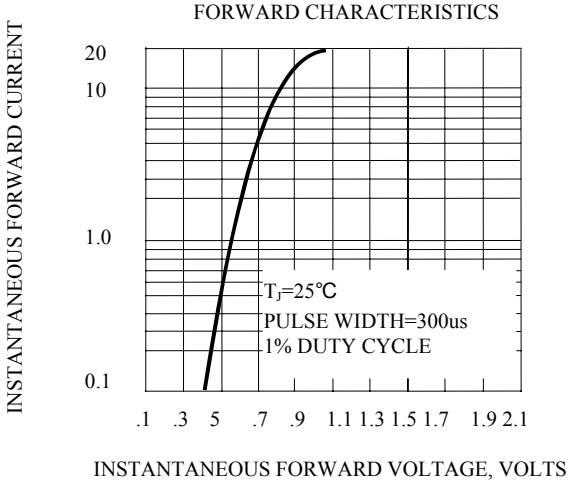


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

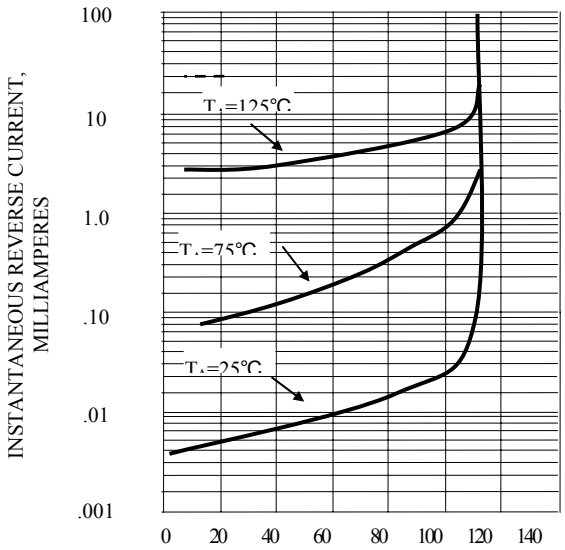


FIG. 5 - MAXIMUM NON-REPETITIVE SURGE CURRENT

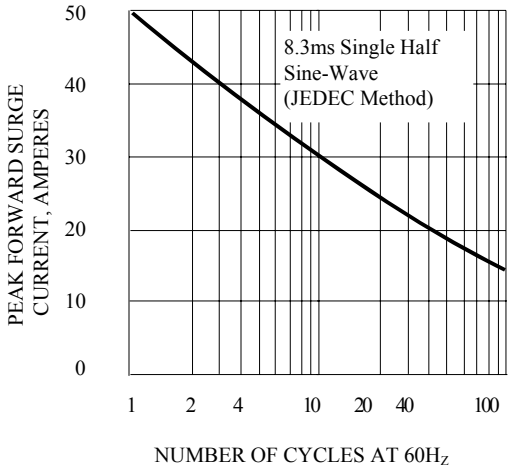


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

