



TAYCHIPST SURFACE MOUNT RECTIFIER

ES3AB THRU ES3JB

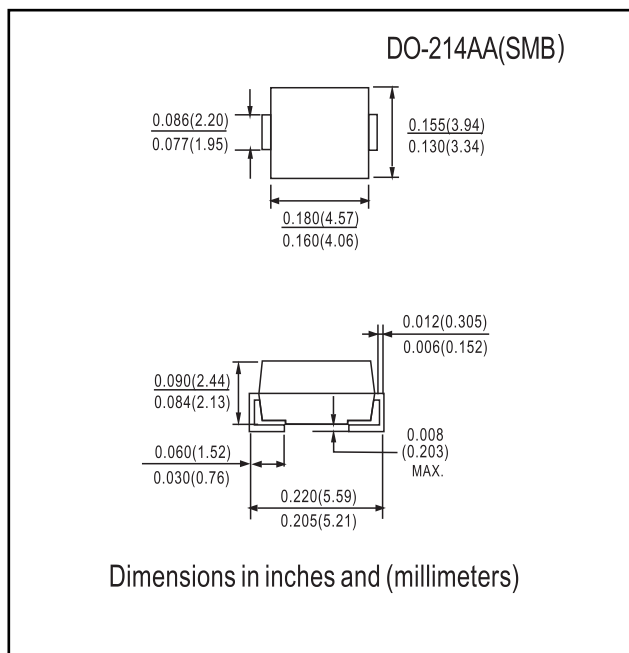
50V-600V 3.0A

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Alcohol, Isopropanol and similar solvents
- The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

Case: JEDEC DO-214AA, molded plastic
 Terminals: Solderable per
 MIL- STD-202, Method 208
 Polarity: Color band denotes cathode
 Weight: 0.007 ounces, 0.21 grams
 Mounting position: Any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	ES3AB	ES3BB	ES3DB	ES3GB	ES3JB	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T _A =55 °C	I _(AV)	3.0					A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	125					A
Peak Forward Voltage at 3.0A DC	V _F	0.95		1.25		1.70	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0 100					μA
Maximum Reverse Recovery Time(Note 1)	T _{RR}	35					nS
Typical Junction Capacitance (Note2)	C _J	70			45		pF
Typical Thermal Resistance (Note3)	R _{JA}	20					°C/W
Operating Temperature Range	T _J	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES: 1.Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A

2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC

3.Thermal resistance junction to ambient.



RATINGS AND CHARACTERISTIC CURVES ES3AB THRU ES3JB

FIG.1 - FORWARD CURRENT DERATING CURVE

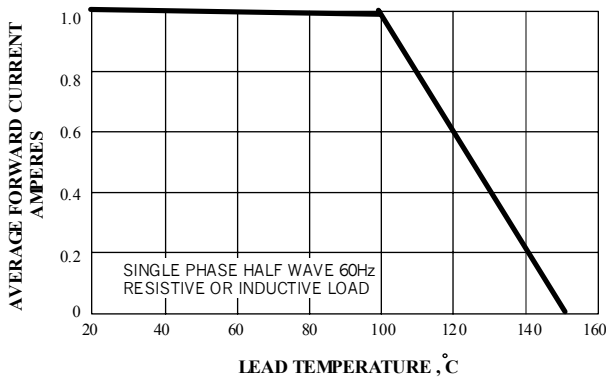


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

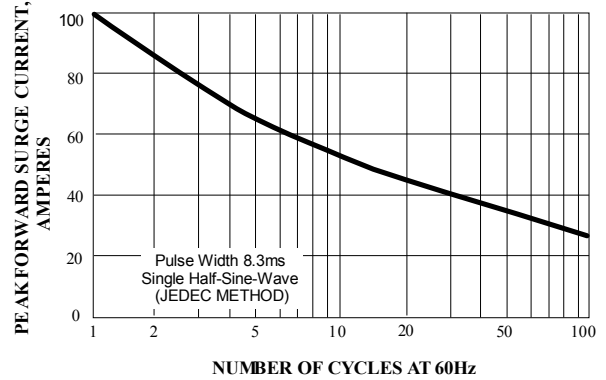


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

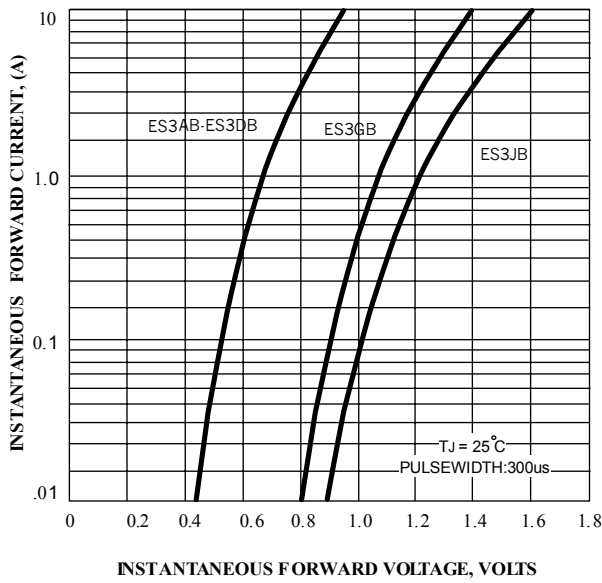


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

