DSK Diode Semiconductor Korea *ERA32-01 --- ERA32-02*

HIGH EFFICIENCY RECTIFIER

VOLTAGE RANGE: 100 --- 200 V
CURRENT: 1.0 A

FEATURES

- ◇ Low cost
- ◇ Diffused junction
- ◇ 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--41,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.012 ounces,0.34 grams
- ◇ Mounting position: Any

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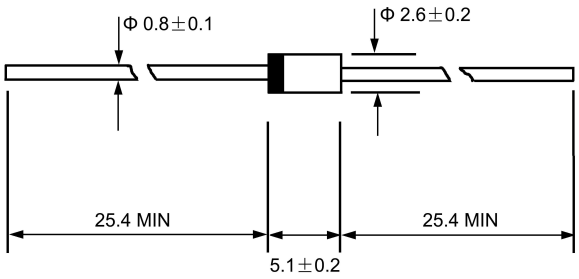

Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,60 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		ERA32 - 01	ERA32 - 02	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	V
Maximum RMS voltage	V_{RMS}	70	140	V
Maximum DC blocking voltage	V_{DC}	100	200	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.0		A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	40.0		A
Maximum instantaneous forw ard voltage @ 1.0A	V_F	0.92		V
Maximum reverse current @T_A=25℃	I_R	5.0		μA
at rated DC blocking voltage @T_A=100℃		50.0		
Maximum reverse recovery time (Note1)	t_{rr}	50		ns
Typical junction capacitance (Note2)	C_J	20		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	60		℃/W
Operating junction temperature range	T_J	- 55 ----- + 150		℃
Storage temperature range	T_{STG}	- 55 ----- + 150		℃

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

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

3. Thermal resistance from junction to ambient.

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

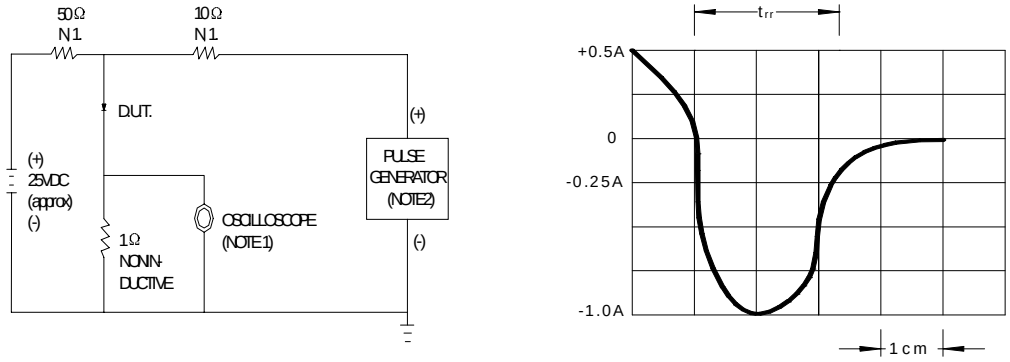

FIG.3 --FORWARD DERATING CURVE

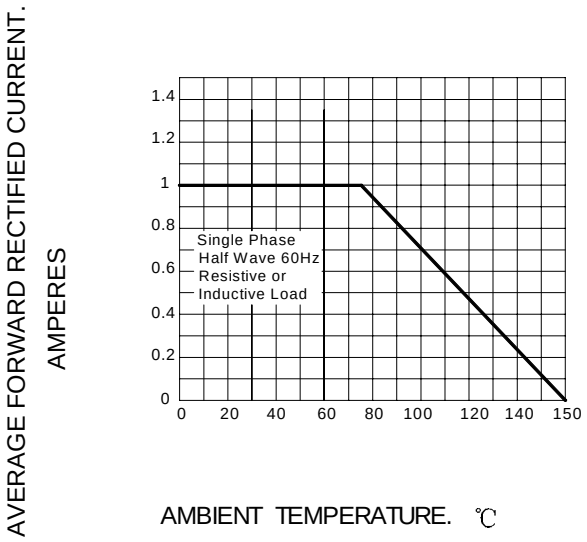

FIG.4--TYPICAL JUNCTION CAPACITANCE

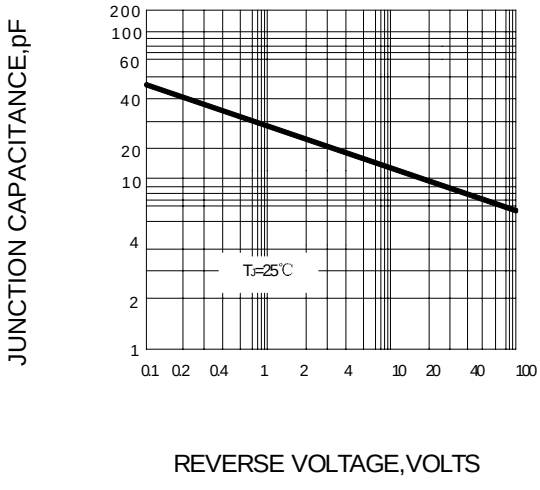

FIG.5--PEAK FORWARD SURGE CURRENT

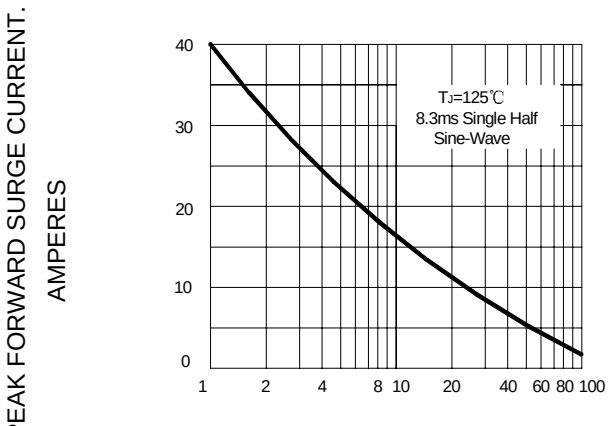

FIG.1 -- TYPICAL FORWARD CHARACTERISTIC