DSK Diode Semiconductor Korea *R1200F --- R2000F*

HIGH VOLTAGE RECTIFIERS

VOLTAGE RANGE: 1200 --- 2000 V
CURRENT: 0.2A to 0.5A

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: 0.012ounces,0.34 grams
- ◇ Mounting position: Any

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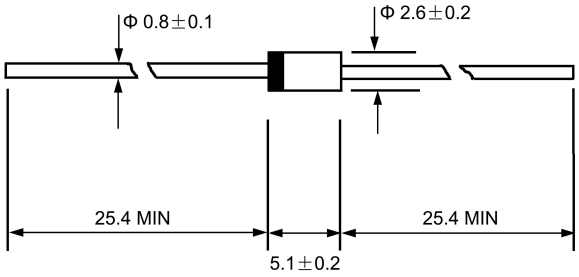

Dimensions in millimeters

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%.

		R1200F	R1500F	R1800F	R2000F	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	1200	1500	1800	2000	V
Maximum RMS voltage	V_{RMS}	840	1050	1260	1400	V
Maximum DC blocking voltage	V_{DC}	1200	1500	1800	2000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	0.5			0.2	A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	30.0				A
Maximum instantaneous forw ard voltage @ 0.5A	V_F	2.5			4.0	V
Maximum reverse current @T_A=25℃ at rated DC blocking voltage @T_A=100℃	I_R	5.0 100.0				μA
Maximum reverse capacitance (Note1)	t_{rr}	500				ns
Typical thermal resistance (Note2)	$R_{\theta JA}$	35				℃/W
Typical junction capacitance (Note3)	C_J	15				pF
Operating junction temperature range	T_J	- 55 ---- + 150				℃
Storage temperature range	T_{STG}	- 55 ---- + 150				℃

NOTE: 1. Measrued with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Thermal resistance from junction to ambient.
3. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

FIG.1 – FORWARD DERATING CURVE

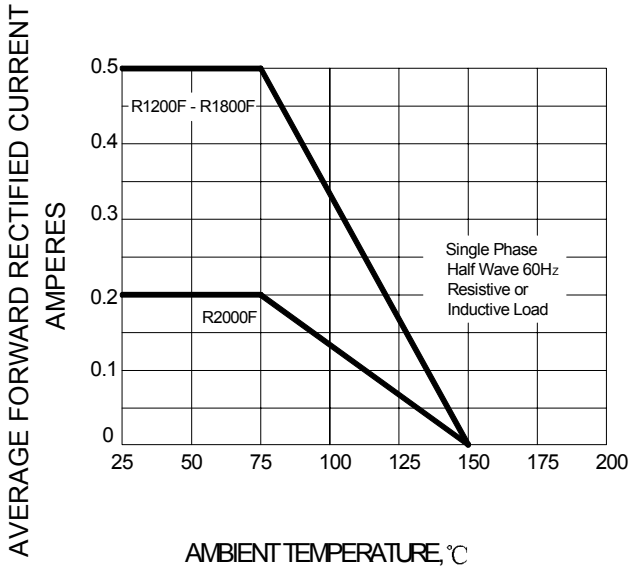

FIG.2 – TYPICAL FORWARD CHARACTERISTICS

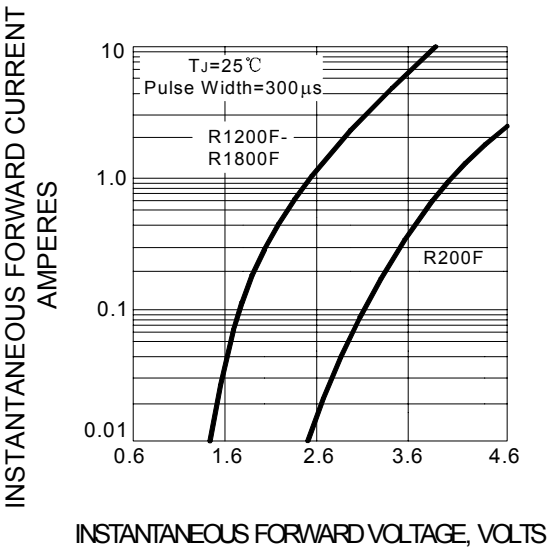

FIG.3 – PEAK FORWARD SURGE CURREENT

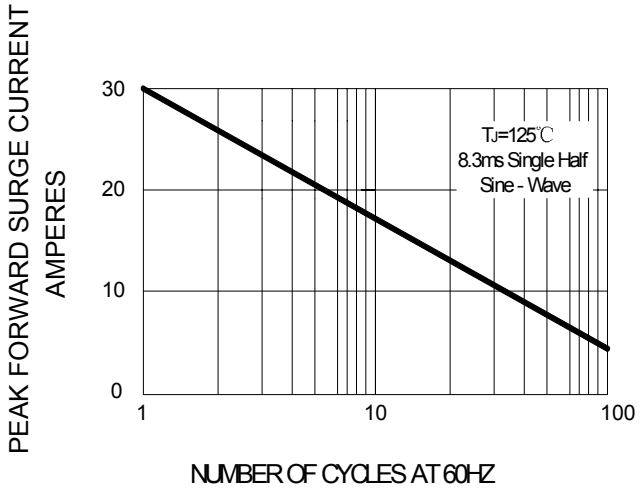

FIG.4 – TYPICAL JUNCTION CAPACITANCE