DSK Diode Semiconductor Korea *ERC01-02---ERC01-10*

PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 200 --- 1000 V
CURRENT: 1.5 A

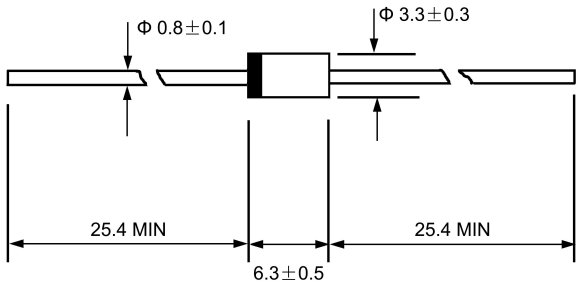
FEATURES

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

MECHANICAL DATA

- ◇ Case:JEDEC DO--15,molded plastic
- ◇ Terminals: Axial lead ,solderable per MIL- STD-202,Method 208
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.014 ounces,0.39 grams
- ◇ Mounting position: Any

DO - 15



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%.

		ERC01 -02	ERC01 -04	ERC01 -06	ERC01 -10	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	1000	V
Maximum average forw ard rectified current 9.5mm lead length, @T_A=75℃	$I_{F(AV)}$	1.5				A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load @T_J=125℃	I_{FSM}	130.0				A
Maximum instantaneous forw ard voltage @ 1.5 A	V_F	1.0				V
Maximum reverse current @T_A=25℃	I_R	5.0				μA
at rated DC blocking voltage @T_A=100℃		50.0				
Typical junction capacitance (Note1)	C_J	20				pF
Typical thermal resistance (Note2)	$R_{\theta JA}$	40				℃/W
Operating junction temperature range	T_J	- 55---- + 150				℃
Storage temperature range	T_{STG}	- 55 ---- + 150				℃

NOTE: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient.

FIG.1 -- FORWARD CHARACTERISTIC

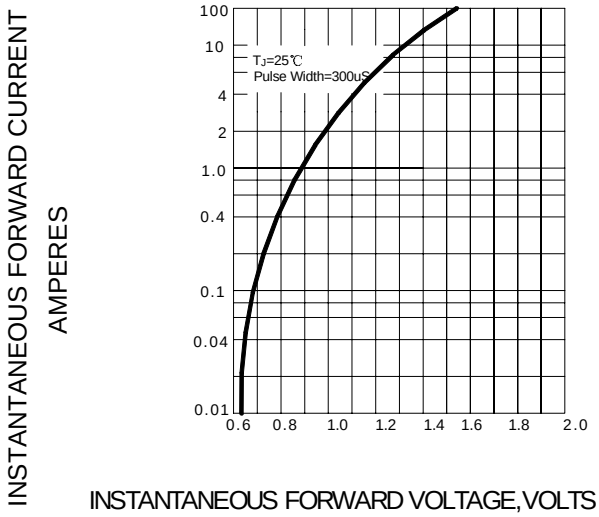


FIG.2 -- JUNCTION CHARACTERISTICS

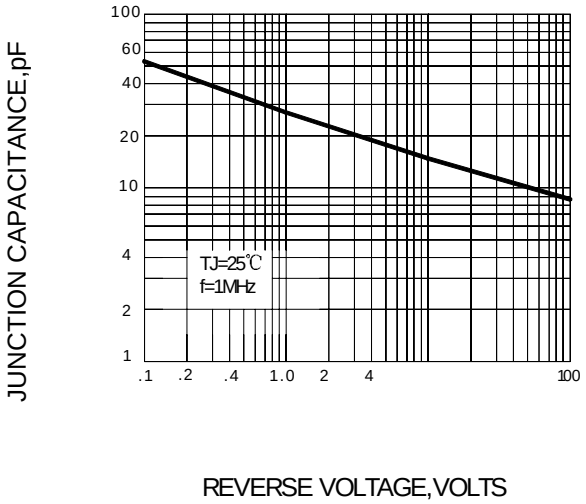


FIG.3 --CURRENT DERATING CURVE

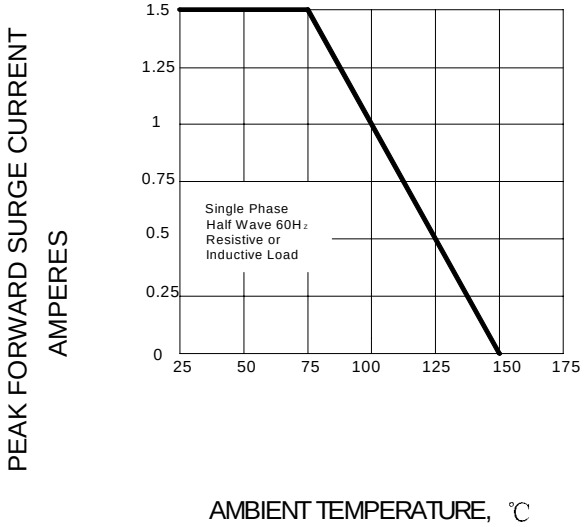


FIG.4 --PEAK FORWARD SURGE CURRENT

