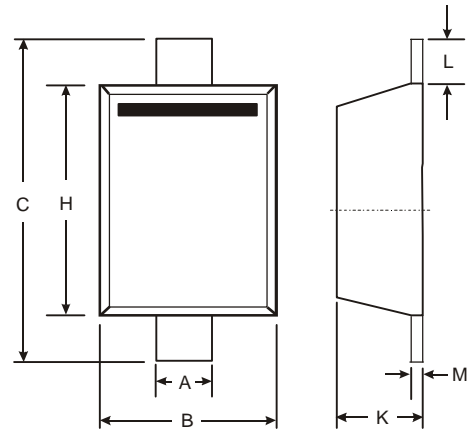


Features

- Ultra small mold type.(EMD2)
- Low I_R
- High reliability

Mechanical Data

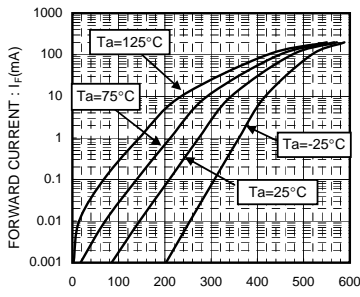
- Case: Molded Plastic



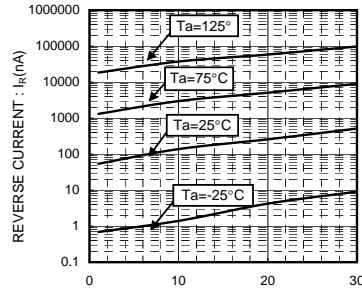
SOD-523		
Dim	Min	Max
A	0.25	0.35
B	0.70	0.90
C	1.50	1.70
H	1.10	1.30
K	0.55	0.65
L	0.10	0.30
M	0.10	0.12
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

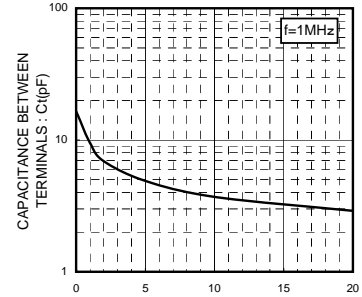
Parameter	Symbol	Limits			Unit	
Reverse voltage(DC)	V_R	30			V	
Average rectified forward current	I_o	100			mA	
Forward current surge peak(60Hz/1cyc)	I_{FSM}	500			mA	
Junction temperature	T_J	125			$^\circ\text{C}$	
Storage temperature	T_{stg}	-40to+125			$^\circ\text{C}$	
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.45	V	$I_F=10\text{mA}$
Reverse current	I_R	-	-	0.5	μA	$V_R=10\text{V}$



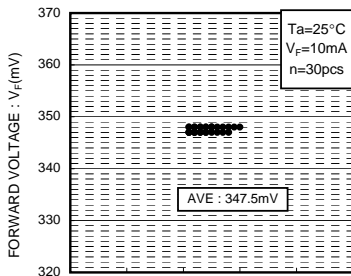
FORWARD VOLTAGE : V_F (mV)
 V_F - I_F CHARACTERISTICS



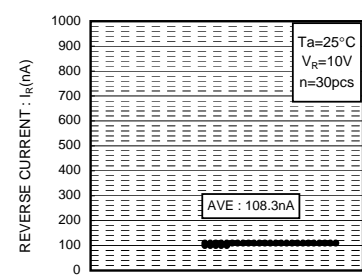
REVERSE VOLTAGE : V_R (V)
 V_R - I_R CHARACTERISTICS



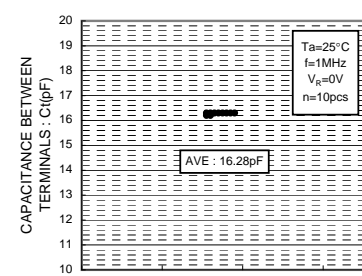
REVERSE VOLTAGE : V_R (V)
 V_R - C_t CHARACTERISTICS



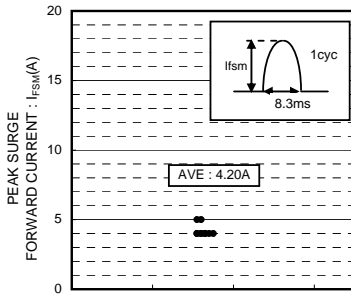
V_F DISPERSION MAP



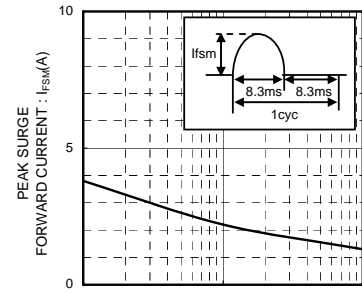
I_R DISPERSION MAP



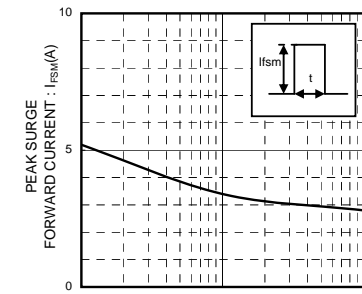
C_t DISPERSION MAP



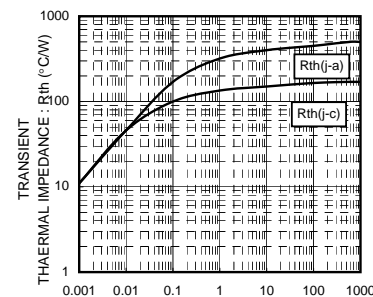
I_{FSM} DISPERSION MAP



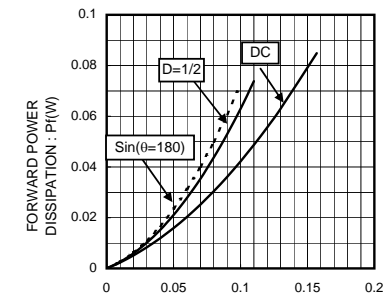
NUMBER OF CYCLES
 I_{FSM} -CYCLE CHARACTERISTICS



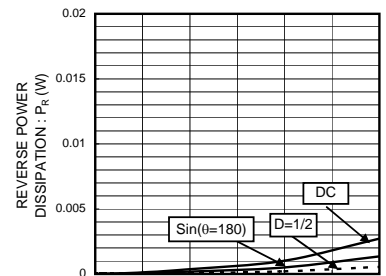
TIME : t (ms)
 I_{FSM} -t CHARACTERISTICS



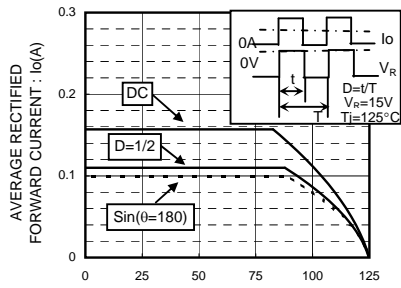
TIME : t (s)
 R_{th} -t CHARACTERISTICS



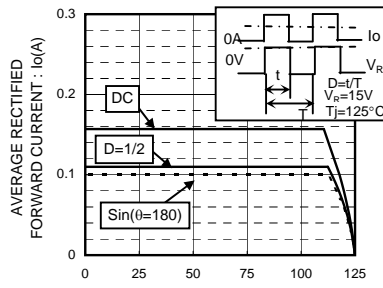
AVERAGE RECTIFIED FORWARD CURRENT : I_o (A)
 I_o - P_F CHARACTERISTICS



REVERSE VOLTAGE : V_R (V)
 V_R - P_R CHARACTERISTICS



AMBIENT TEMPERATURE : Ta(°C)
Derating Curve*(Io-Ta)



CASE TEMPERATURE : Tc(°C)
Derating Curve*(Io-Tc)