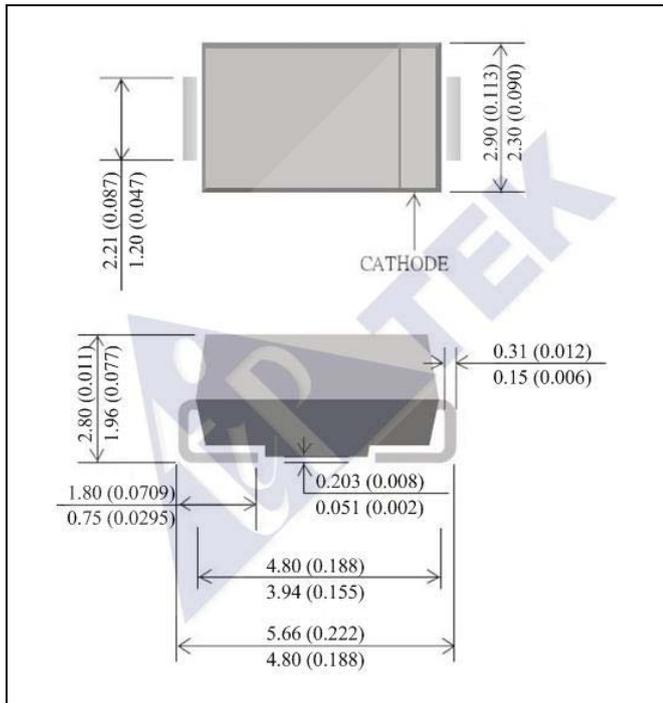


## 1A SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS



CASE : DO-214AC(SMA)

DIMENSIONS IN MILLIMETERS AND (INCHES)

### FEATURES

- EXTREMELY LOW VF
- LOW STORED CHARGE, MAJORITY CARRIER CONDUCTION
- LOW POWER LOSS / HIGH EFFICIENCY
- UL 94V-0 FLAME RETARDANT EPOXY MOLDING COMPOUND

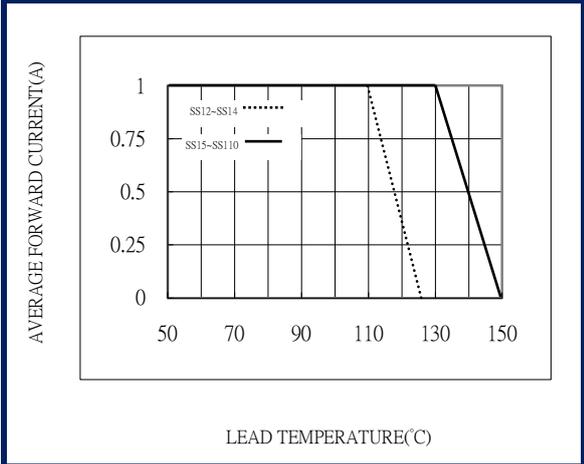
### MECHANICAL DATA

- CASE : TRANSFER MOLDED
- TERMINALS : SOLDERABLE PER MIL-STD-750, METHOD 2026
- POLARITY : CATHODE INDICATED BY COLOR BAND
- WEIGHT : 0.066 GRAMS  
Pb Free: SS12~SS110  
Halogen Free: SS12-H~SS110-H

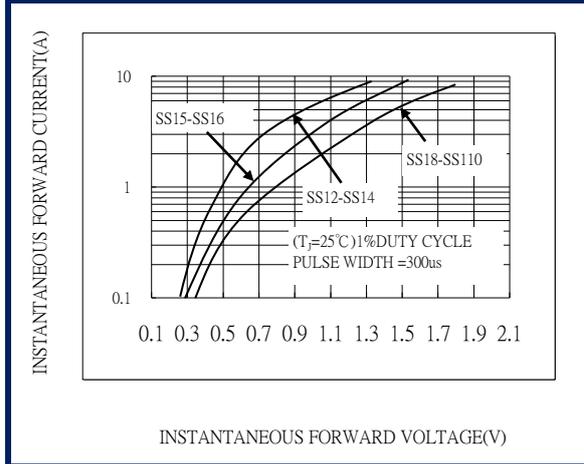
### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

RATINGS AT 25°C AMBIENT TEMPERATURE UNLESS OTHERWISE SPECIFIED.									
PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	UNITS
MAXIMUM RECURRENT PEAK REVERSE VOLTAGE	$V_{RRM}$	20	30	40	50	60	80	100	V
MAXIMUM RMS VOLTAGE	$V_{RMS}$	14	21	28	35	42	56	70	V
MAXIMUM DC BLOCKING VOLTAGE	$V_{DC}$	20	30	40	50	60	80	100	V
MAXIMUM AVERAGE FORWARD RECTIFIED CURRENT .375" (9.5mm) LEAD LENGTH)	$I_O$	1.0							A
PEAK FORWARD SURGE CURRENT, 8.3ms SINGLE HALF SINE-WAVE SUPERIMPOSED ON RATED LOAD	$I_{FSM}$	30							A
TYPICAL THERMAL RESISTANCE	$R_{\theta JA}$	88							°C/W
STORAGE TEMPERATURE RANGE	$T_{STG}$	- 55 TO + 150							°C
OPERATING TEMPERATURE RANGE	$T_J$	- 55 TO + 125			- 55 TO + 150				°C
ELECTRICAL CHARACTERISTICS (AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)									
PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	UNITS
MAXIMUM FORWARD VOLTAGE AT 1A	$V_F$	0.55		0.75		0.85			V
MAXIMUM DC REVERSE CURRENT	$I_R$	25°C		0.5					mA
		125°C		10					
TYPICAL JUNCTION CAPACITANCE (NOTE 1)	$C_J$	110			90				PF

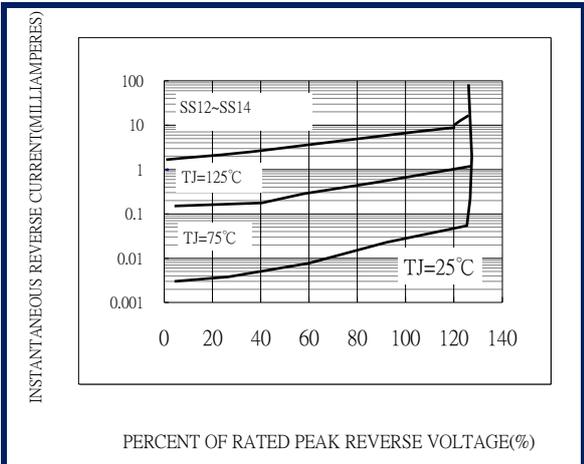
NOTES : 1. MEASURED AT 1 MHZ AND APPLIED REVERSE VOLTAGE OF 4.0 VOLTS



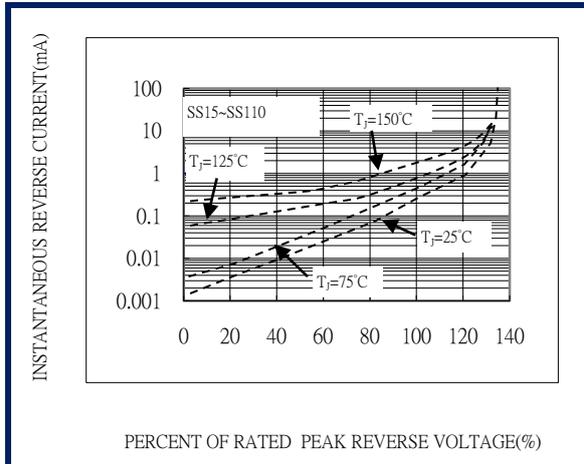
**Fig.1-FORWARD CURRENT DERATING CURVE**



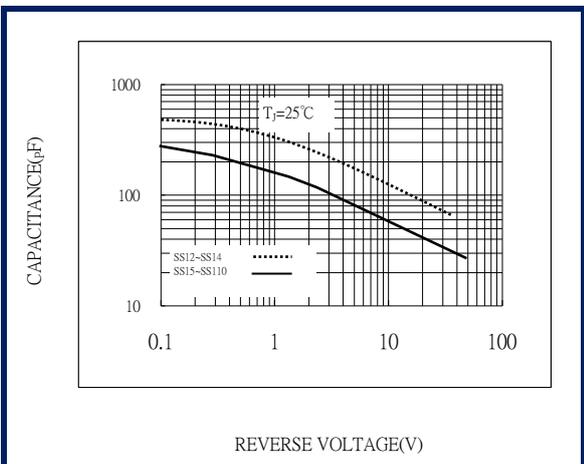
**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



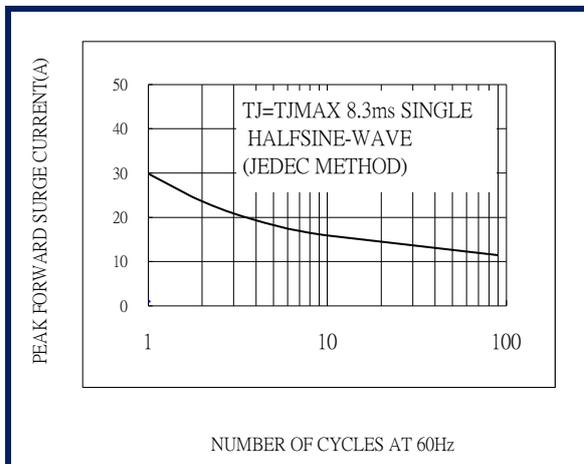
**Fig.3-TYPICAL REVERSE CHARACTERISTICS**



**Fig.4-TYPICAL REVERSE CHARACTERISTICS**



**Fig.5-TYPICAL JUNCTION CAPACITANCE**



**Fig.6-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**