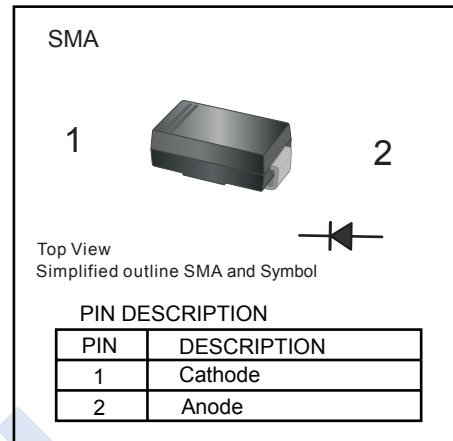


Ultra Fast Rectifier

1KF2120A ~ 1KF2170A

■ Features

- For surface mounted applications
- Ultra fast switching for high efficiency
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed
250°C/10 seconds at terminals



■ Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

Parameter	Symbol	1KF2120A	1KF2160A	1KF2170A	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200	600	1000	V
Maximum RMS Voltage	V_{RMS}	140	420	700	
Maximum DC Blocking Voltage	V_{DC}	200	600	1000	
Instantaneous Forward Voltage at $I_F=1.0A$	V_F	1.0	1.7		A
Maximum Average Forward Rectified Current @ $T_A = 55^\circ C$	$I_{F(AV)}$	1.0			
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	30			μA
Maximum DC Reverse Current $T_A=25^\circ C$ at rated DC blocking voltage $T_A=100^\circ C$	I_R	5 50			
Reverse Recovery Time *1	t_{rr}	50	75		ns
Typical Junction Capacitance *2	C_j	15			pF
Typical Thermal Resistance *3	$R_{\theta JA}$	50			°C/W
Junction Temperature	T_j	150			°C
Storage Temperature	T_{stg}	-55 to 150			

* 1 Reverse recovery test condition: $I_F = 0.5 A$, $I_R = 1 A$, $I_{rr} = 0.25 A$

* 2 Measured at 1MHz and applied reverse voltage of 4V D.C

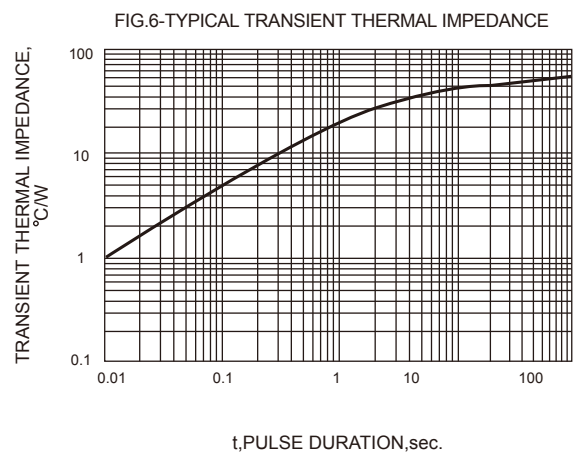
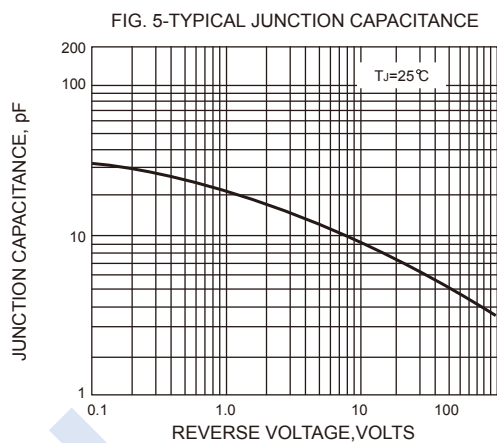
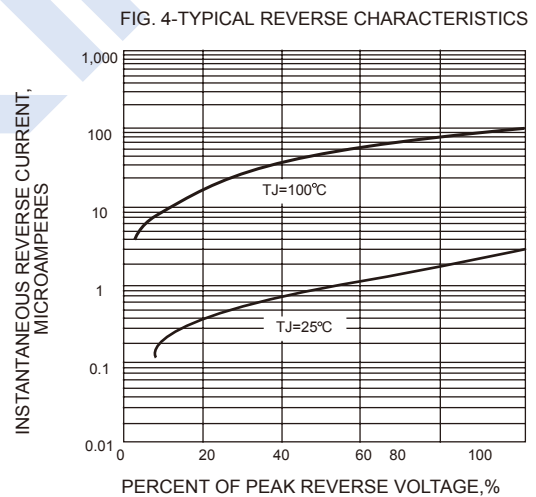
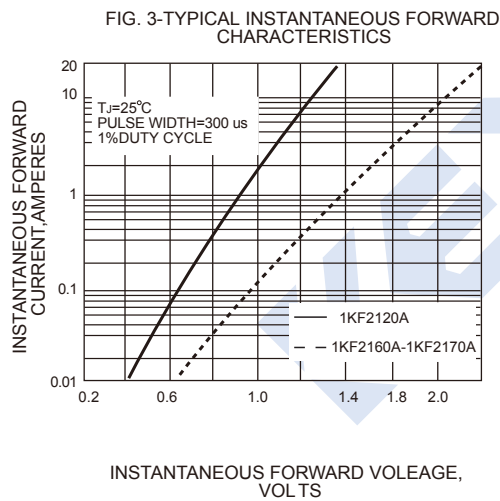
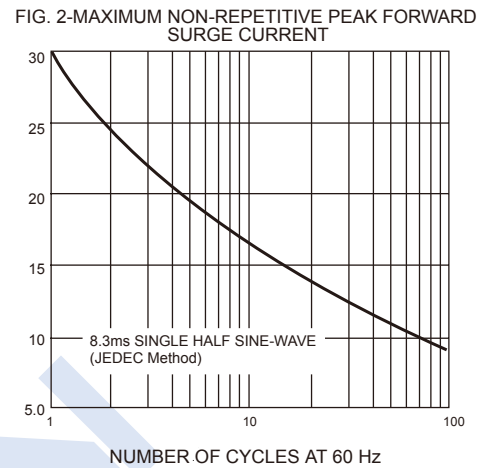
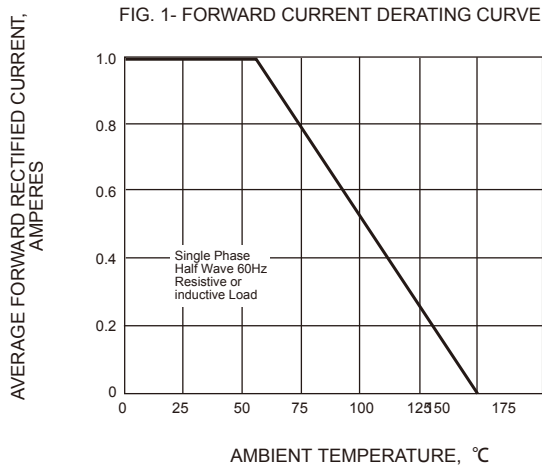
* 3 P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas.

■ Marking

NO.	1KF2120A	1KF2160A	1KF2170A
Marking	2R02	2R06	2R10

1KF2120A ~ 1KF2170A

Typical Characteristics

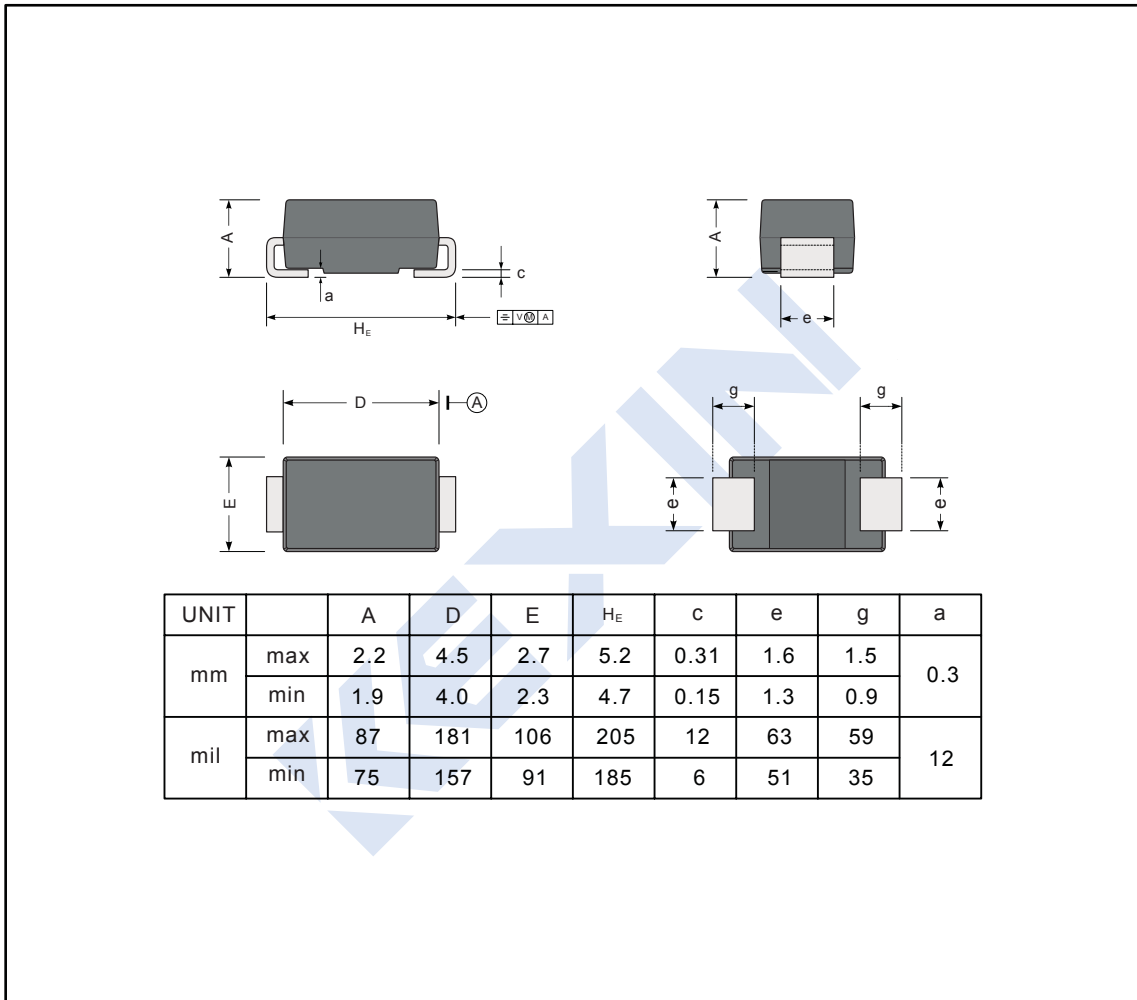


1KF2120A ~ 1KF2170A

■ Package Outline Dimensions

Plastic surface mounted package; 2 leads

SMA



■ The recommended mounting pad size

