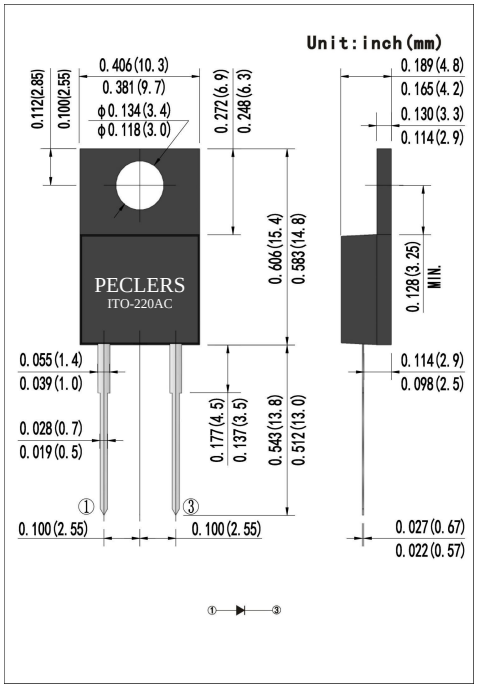
PECLERS®

SUPERFAST RECOVERY RECTIFIER

REVERSE VOLTAGE: **200 to 600 VOLTS**

FORWARD CURRENT: **10 AMPERE**



FEATURES

· Low forward voltage drop
· Low leakage
· High current capability
· Super fast switching speed
· High forward surge capability
· High reliability.

MECHANICAL DATA

Case: Molded plastic, ITO-220AC
Epoxy: UL 94V-O rate flame retardant
Lead: lead solderable per MIL-STD-202, method 208 guaranteed
Polarity: Color band denotes cathode end
Mounting position: Any
Weight: 0.0518ounce, 1.47gram

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	Symbols	*SF1004F*	*SF1006F*	*SF1008F*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	600	**Volts**
Maximum RMS Voltage	V_{RMS}	140	280	420	**Volts**
Maximum DC Blocking Voltage	V_{DC}	200	400	600	**Volts**
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at T_A=100℃	$I_{(AV)}$	10			**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	90			**Amp**
Rating for fusing (t<8.3ms)	I^2t	33.615			A^2S
Maximum Forward Voltage at 10.0A DC and 25℃	V_F	1.0	1.3	1.7	**Volts**
Maximum Reverse Current at T_A=25℃	I_R	10			**uAmp**
at Rated DC Blocking Voltage T_A=125℃		500			
Maximum Reverse Recovery Time (Note 1)	T_{RR}	35			**nS**
Typical Junction Capacitance (Note 2)	C_J	200			**pF**
Typical Thermal Resistance	$R_{\theta Jc}$	3			**℃/W**
Storage Temperature Range	T_J, T_{STG}	-55 to +150			**℃**

NOTES:
1- Reverse Recovery Test Conditions：I_F=.5A，I_R=1A，I_{RR}=.25A.
2- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

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RATINGS AND CHARACTERISTIC CURVES

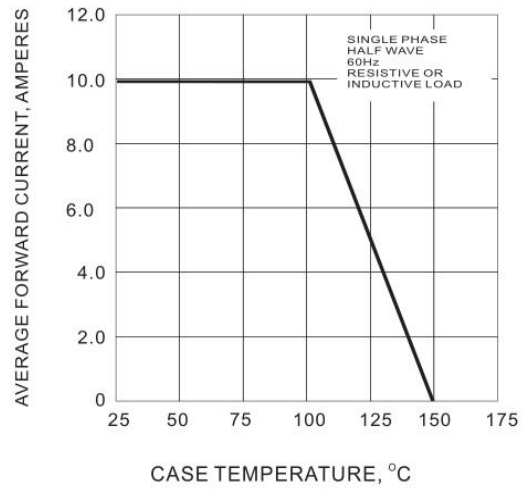

Fig.1 FORWARD CURRENT DERATING CURVE

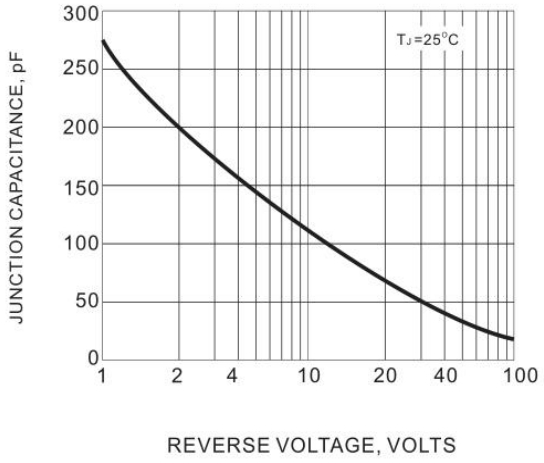

Fig.2 TYPICAL JUNCTION CAPACITANCES

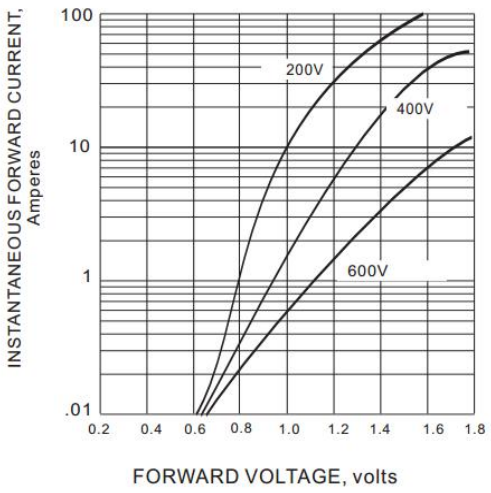

Fig.3 FORWARD CHARACTERISTICS

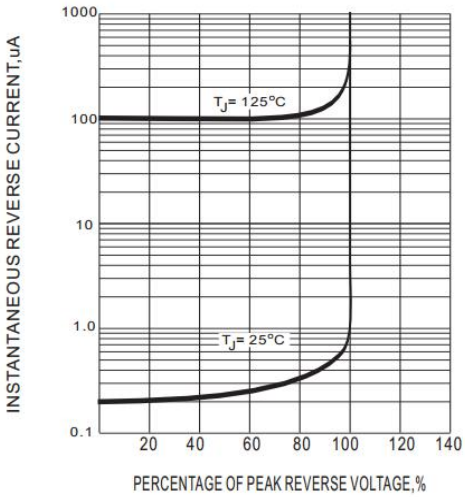

Fig.4 TYPICAL REVERSE CHARACTERISTICS

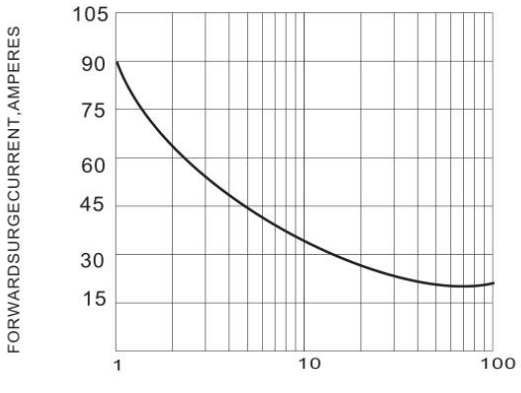

Fig.5 PEAK FORWARD SURGE CURRENT