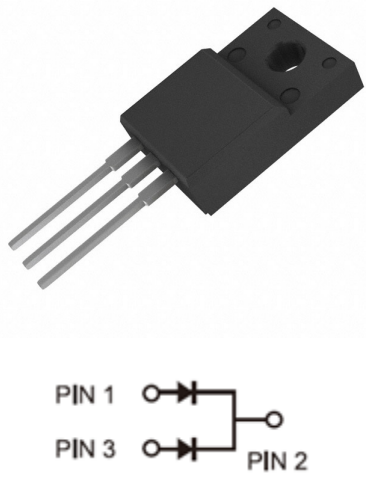


<p><b>Extreme Low VF Trench MOS Schottky</b></p>	<p><b>REVERSE VOLTAGE - 150 Volts</b> <b>FORWARD CURRENT - 10.0 Amperes</b></p>
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Low power loss, high efficiency</li> <li>• Low forward voltage drop</li> <li>• High forward surge capability</li> <li>• High frequency operation</li> <li>• Excellent high temperature stability</li> <li>• Trench MOS Schottky technology</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case: TO-220F</li> <li>• Polarity: As marked</li> <li>• Weight: Approximated 1.6 grams</li> </ul>	<p>TO-220F</p>  <p>The image shows a TO-220F package and its pinout diagram. The package is a black plastic component with three leads. The pinout diagram shows PIN 1 and PIN 3 as anodes and PIN 2 as the cathode.</p>

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**  
Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Characteristics	Symbol	Value		Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	150		V
RMS Reverse Voltage	$V_{RMS}$	105		V
Forward Voltage Drop $I_F=3A$ ( $T_J=25^\circ C$ ) $I_F=3A$ ( $T_J=125^\circ C$ ) $I_F=5A$ ( $T_J=25^\circ C$ ) $I_F=5A$ ( $T_J=125^\circ C$ )	$V_F$	Typ. 0.79 0.62 0.89 0.67	Max. - - 0.95 0.75	V
Maximum Reverse Current at Rated $V_{RRM}$ $T_J=25^\circ C$ $T_J=125^\circ C$	$I_R$	Typ. 1 2	Max. 30 10	$\mu A$ mA
Maximum Average Forward Rectified Current Total device Per diode	$I_O$	10 5		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	$I_{FSM}$	80		A
Peak Repetitive Reverse Current at $t_p=2 \mu s$ , 1 kHz,	$I_{RRM}$	1.0		A
Operating and Storage Temperature Range	$T_J, T_{STG}$	-65 to +150		$^\circ C$

## Rating and Characteristic Curves

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

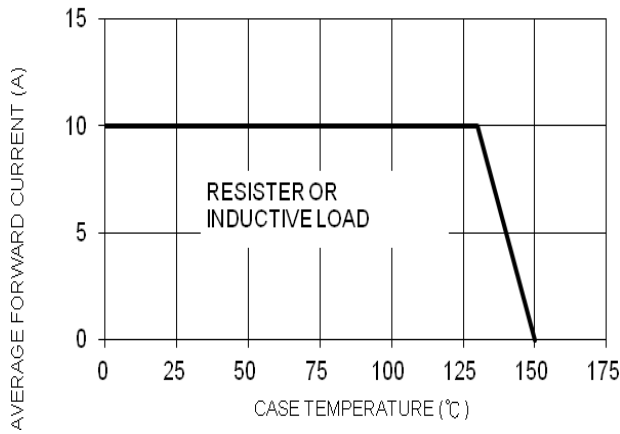


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

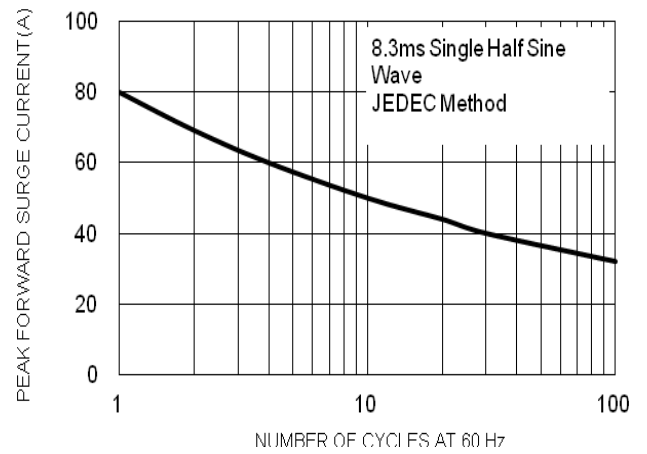


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

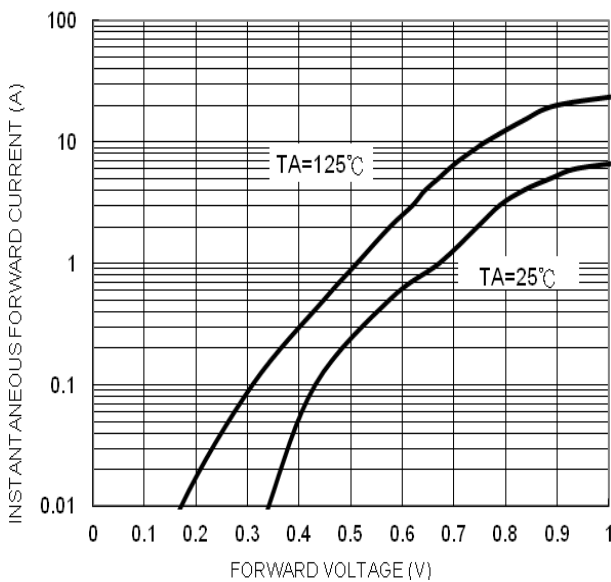


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

