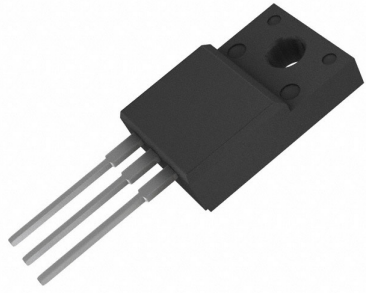
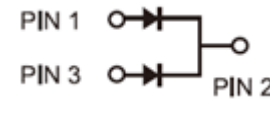


<p><b>Trench MOS Schottky Rectifier</b></p>	<p><b>REVERSE VOLTAGE - 45 Volts</b> <b>FORWARD CURRENT - 10.0 Amperes</b></p>
<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• Low power loss, high efficiency</li> <li>• Low forward voltage drop</li> <li>• High forward surge capability</li> <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><b>MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS</b></p> <p>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%</p>
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Characteristics	Symbol	Value		Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	45		V
RMS Reverse Voltage	$V_{RMS}$	31.5		V
Forward Voltage Drop $I_F=3A$ ( $T_J=25^\circ C$ ) $I_F=3A$ ( $T_J=125^\circ C$ ) $I_F=5 A$ ( $T_J=25^\circ C$ ) $I_F=5 A$ ( $T_J=125^\circ C$ )	$V_F$	Typ. 0.35 0.25 0.40 0.32	Max. - - - -	V
Maximum Reverse Current at Rated $V_{RRM}$ $T_J=25^\circ C$ $T_J=125^\circ C$	$I_R$	Typ. - -	Max. 300 100	$\mu A$ 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		°C

## Rating and Characteristic Curves

FIG. 1 MAXIMUM FORWARD CURRENT DERATING CURVE

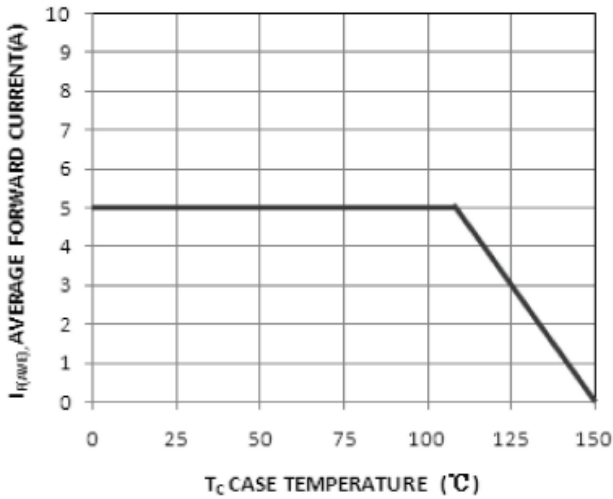


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

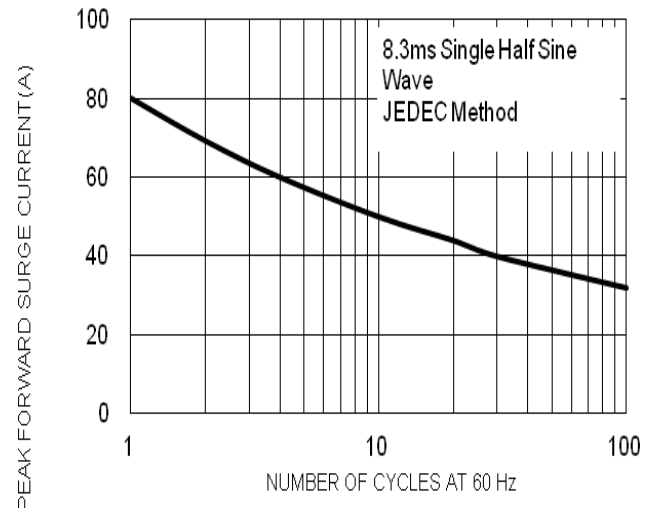


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

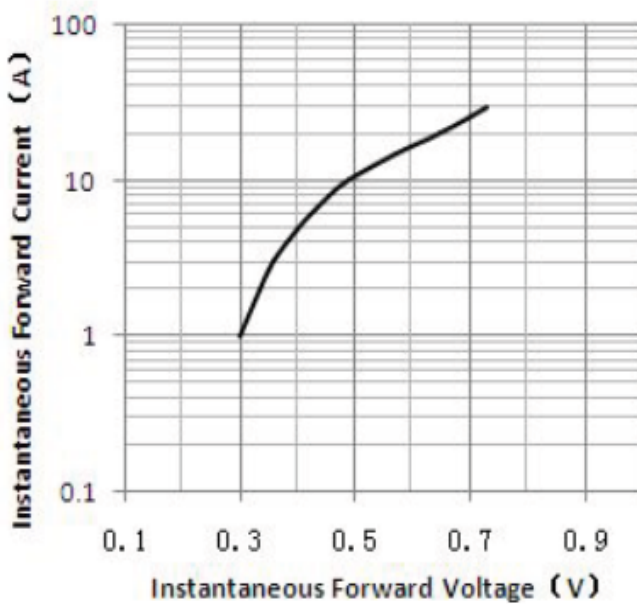


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG

