

Schottky Barrier Rectifier

FEATURES

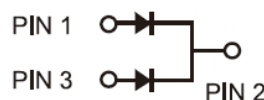
- Low power loss, high efficiency
- Low forward voltage drop
- High forward surge capability
- High frequency operation
- Excellent high temperature stability
- Trench MOS Schottky technology
- Suffix "H" indicates halogen free parts



MECHANICAL DATA

- Case: TO-247
- Terminals: Pure tin plated, lead free
- Polarity: As marked
- Weight: Approximated 1.86 grams

Primary Characteristic	
I_o	2X20A
V_{RRM}	60V
I_{FSM}	275A
$V_F@20A, T_J=125^\circ C$	0.5V
T_{Jmax}	150°C



Maximum Ratings $T_a=25^\circ C$ unless otherwise specified

Characteristics	Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	V
Working Peak Reverse Voltage	V_{RWM}	60	V
Maximum DC Blocking Voltage	V_{DC}	60	V
RMS Reverse Voltage	V_{RMS}	42	V
Maximum Instantaneous Forward Voltage $I_F=5A, T_J=25^\circ C$ $I_F=20A, T_J=125^\circ C$ $I_F=5A, T_J=25^\circ C$ $I_F=20A, T_J=125^\circ C$	V_F	0.38 0.58 0.3 0.5	V
Maximum Reverse Current at Rated V_{RRM} $T_J=25^\circ C$ $T_J=125^\circ C$	I_R	0.2 50	mA
Maximum Average Forward Rectified Current Total device Per diode	I_o	40 20	A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	400	A
Operating Temperature Range	T_J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C
Maximum Thermal Resistance	θ_{JC}	1.5	°C/W
	θ_{JA}	60	

Notes: (1) Pulse test: 300 μs pulse width, 1 % duty cycle

RATINGS AND CHARACTERISTICS CURVES

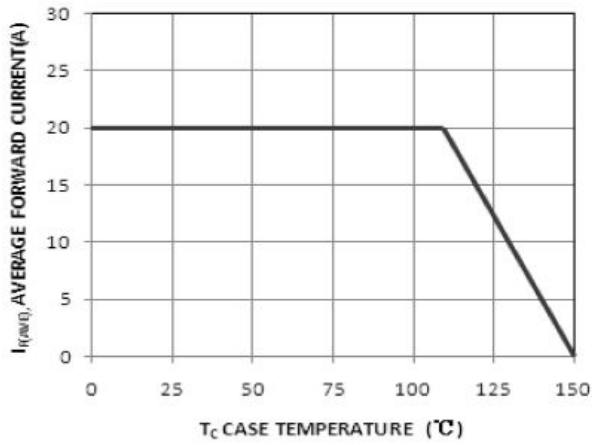


FIG1. MAXIMUM FORWARD CURRENT DERATING CURVE

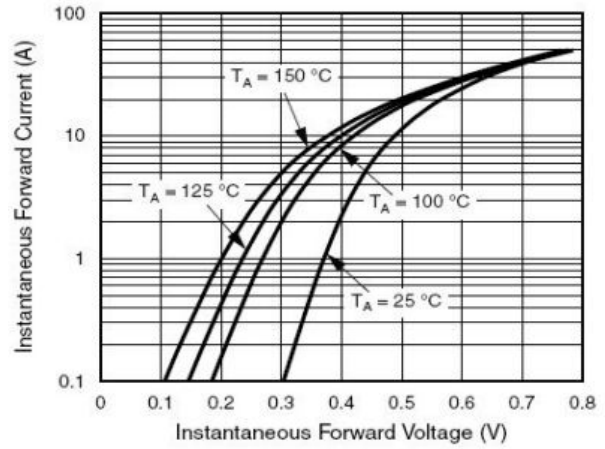


FIG2. TYPICAL FORWARD CHARACTERISTICS PER LEG

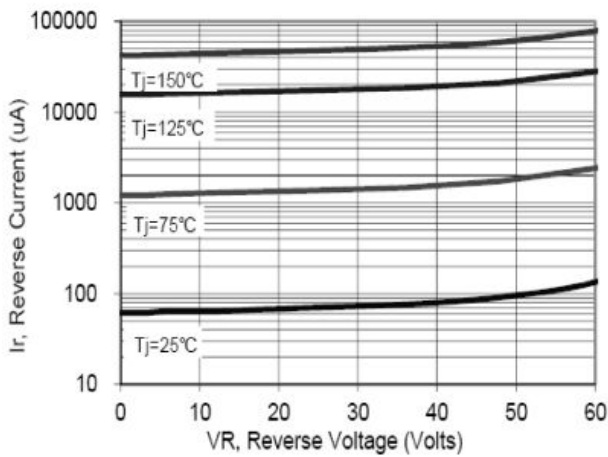


FIG3. TYPICAL REVERSE CHARACTERISTICS PER LEG

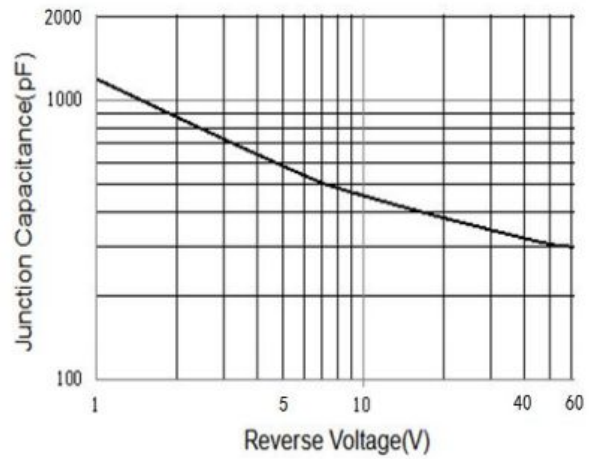


FIG4. TYPICAL JUNCTION CAPACITANCE

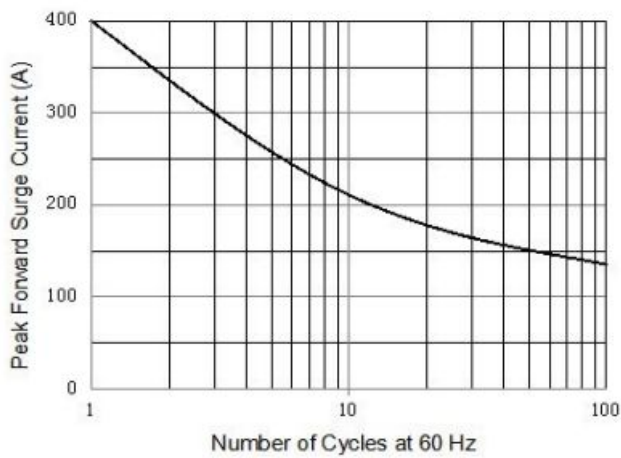


FIG5. PEAK FORWARD SURGE CURRENT

TO-247 PACKAGE OUTLINE

UNIT:mm

SYMBOL	MIN	NOM	MAX	SYMBOL	MIN	NOM	MAX
A	4.60		5.15	A1	1.30		1.60
b	2.86		3.26	b1	1.86		2.26
b2		1.20		C		0.50	
D	19.00		21.00	E	15.45		15.75
E1	12.00		13.06	e		5.45	
L	14.00		14.60	L1	5.20		5.88
L2	24.00		24.40	L3	10.00		10.60
P		3.50		Q	2.30		2.70

