Elektronische Bauelemente

UMMD022~UMMD024

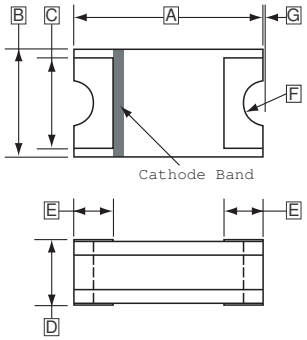
20V~ 40V, 200 mA
Surface Mount Small Signal
Schottky Barrier Rectifiers

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- Lead less chip form, no lead damage
- Lead-free solder joint, no wire bond & lead frame
- Low power loss, high efficiency
- High current capability, low V_F
- Plastic package has underwriters laboratory flammability Classification 94V-0

0603



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.50	1.70	E	0.30	0.40
B	0.80	1.00	F	R 0.20	
C	0.70 TYP.		G	0.05 REF.	
D	0.50	0.80			

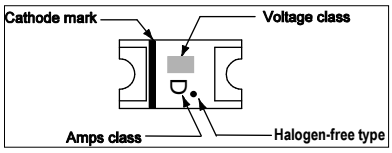
APPLICATION

- Switching mode power supply applications
- Portable equipment battery applications
- High frequency rectification
- DC / DC converter
- Telecommunication

MECHANICAL DATA

- Case: Packed with FRP substrate and epoxy underfilled
- Terminals: Pure tin-plated (lead-free), solderable per MIL-STD-750, method 2026.
- Polarity: Laser cathode band marking
- Weight : 0.003 gram

MARKING



ABSOLUTE MAXIMUM RATINGS (T_A = 25℃ unless otherwise specified)

PARAMETER	SYMBOL	VALUE		UNIT	TEST CONDITION
		UMMD022	UMMD024		
Repetitive Peak Reverse Voltage	V_{RRM}	20	40	V	
Average Forward Current	$I_{F(AV)}$	200		mA	
Peak Forward Surge Current	I_{FSM}	2.0		A	@ 8.3 ms half sine-wave
Junction Temperature	T_J	125		℃	
Operating and Storage Temperature	T_{OPR}, T_{STG}	-40 ~ 125			

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

TYPE NUMBER	SYMBOL	MIN	TYP	MAX	UNIT	TEST CONDITION
Forward Voltage	V_F	-	0.30	-	V	I_F = 50mA
		-	0.40	-		I_F = 100mA
		-	0.43	0.45		I_F = 200mA
Repetitive Peak Reverse Current	I_{RRM}	-	1.5	30	μA	V_R = 10V, T_A = 25℃
		-	8	50		V_R = Max. V_{RRM}, T_A=25℃
Junction capacitance	C_J	-	35	-	pF	V_R = 4V, f = 1.0 MHz
Typical Thermal Resistance, Junction to Ambient	$R_{\theta JA}$	-	160	-	℃ / W	
Typical Thermal Resistance, Junction to Lead	$R_{\theta JL}$	-	110	-		

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RATINGS AND CHARACTERISTIC CURVES

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

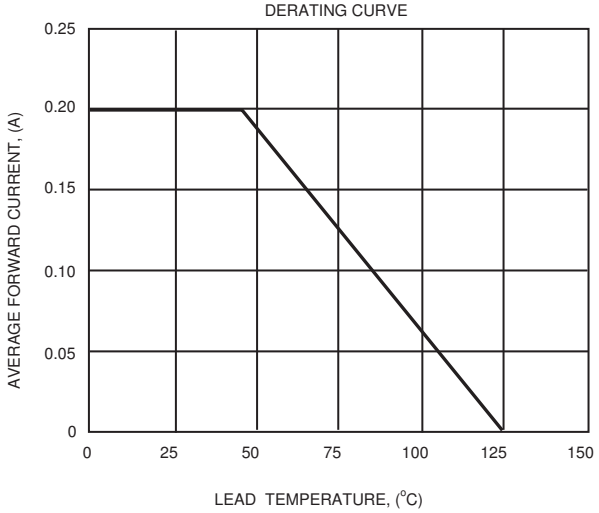

FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

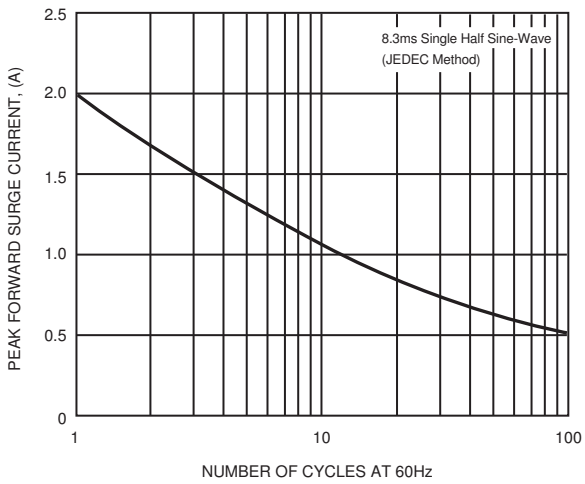

FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

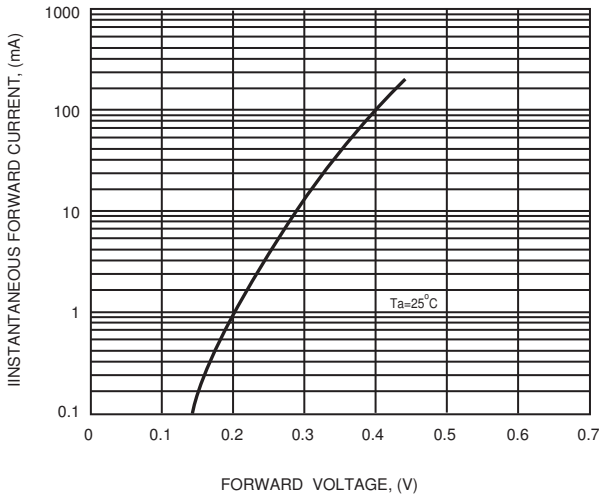

FIG.4 - TYPICAL REVERSE CHARACTERISTICS

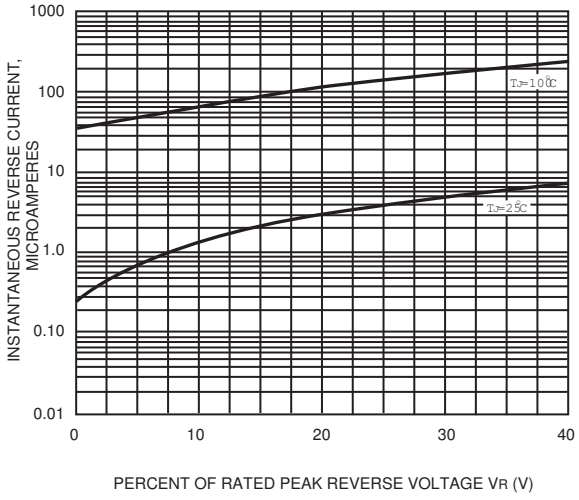

FIG. 5 - TYPICAL JUNCTION CAPACITANCE