

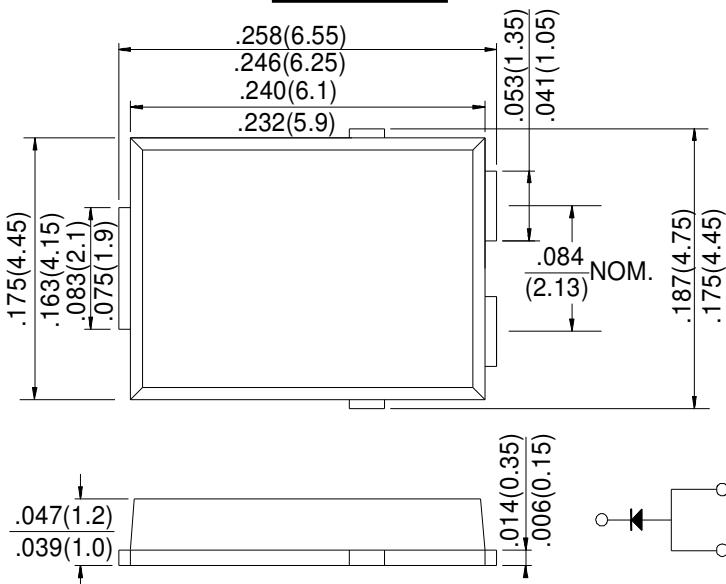
SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS			REVERSE VOLTAGE - 45Volts FORWARD CURRENT - 10.0 Amperes			
FEATURES ● Ideal for automated placement ● Low forward voltage drop, low power losses ● High efficiency Operation ● Lead free in comply with EU RoHS 2002/95/EC directives. ● Green molding compound as per IEC61249 Std..(Halogen Free) MECHANICAL DATA ● Case: TO-277A (SMPC) ● Terminals: Solderable per MIL-STD-750, Method 2026			TO-277A 			
			Dimensions in inches and (millimeters)			
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS Rating 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	S10P45U	UNIT	
Maximum Recurrent Peak Reverse Voltage			VRRM	45	V	
Maximum RMS Voltage			VRMS	31.5	V	
Maximum DC Blocking Voltage			VDC	45	V	
Maximum Average Forward Rectified Current (Note 1) Tc=110°C			Io	10	A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)			IFSM	300	A	
Instantaneous Forward voltage	@If=3A	TJ=25°C	VF	0.33(TYP.)		V
	@If=5A			0.36(TYP.)		
	@If=10A			0.41(TYP.)	0.45(MAX.)	
	@If=3A	0.25(TYP.)				
	@If=5A	0.30(TYP.)				
	@If=10A	0.39(TYP.)				
Instantaneous Reverse Current @VR=45V		TJ=25°C	IR	0.3 (MAX.)		mA
		TJ=125°C		9.1 (TYP.)		mA
Typical Thermal Resistance,Junction to Ambient (Note 1)			ReJA	60	°C/W	
Typical Thermal Resistance,Junction to Case (Note 1)			ReJC	8	°C/W	
Operating Junction Temperature			TJ	-55 to +150	°C	
Storage Junction Temperature			TSTG	-55 to +150	°C	
Note: 1. Mounted on 50 cm ² FR-4 PCB.						
REV. 2, 24-Oct-2012						



FIG.1-FORWARD CURRENT DERATING CURVE

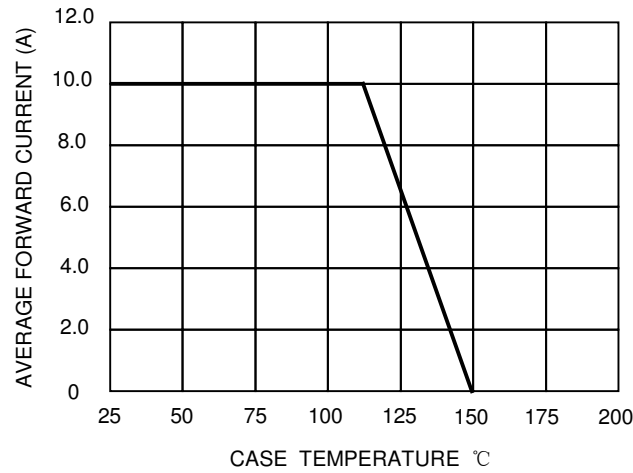


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

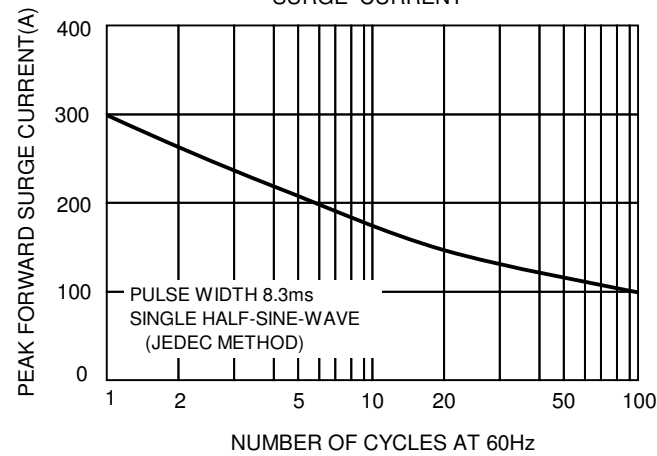


FIG.3-TYPICAL REVERSE CURRENT

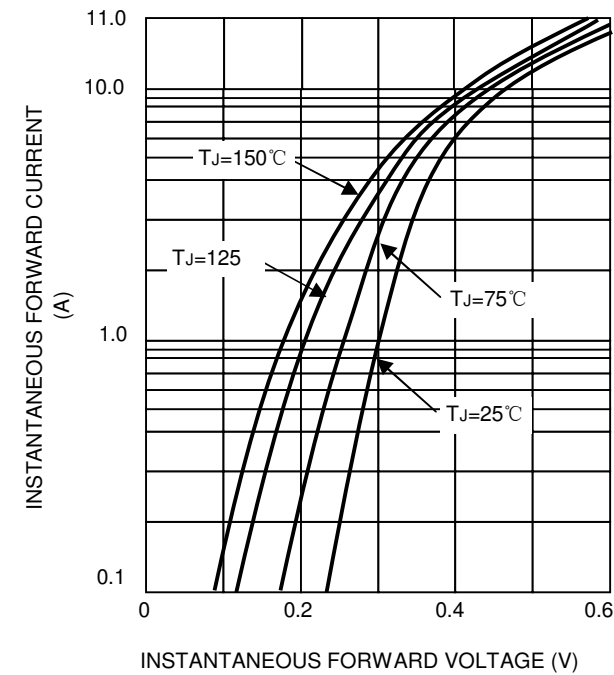


FIG.4-TYPICAL FORWARD VOLTAGE

