ES10G

Super Fast Diode

Features

- The plastic package carries UL Flammability Classification 94V-0
- For surface mounted applications
- Low reverse leakage
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:260℃/10 seconds at terminals

Mechanical Characteristics

- Case: SMC(DO-214AB) package molded plastic body over passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any

Electrical Parameters

PARAMETER		SYMBOL	ES10G	UNIT
Maximum repetitive peak reverse voltage		V_{RRM}	400	V
Maximum RMS voltage		V_{RMS}	280	V
Maximum DC blocking voltage		V_{DC}	400	V
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load		I_{AV}	10	A
Peak forward surge current		I_{FSM}	180	A
Maximum instantaneous forward voltage at 10A		V_F	1.35	V
Maximum DC reverse current at rated DC blocking voltage	T_A=25 ℃	I_R	5	uA
	T_A=100 ℃	I_{RT}	100	uA
Maximum reverse recovery time (NOTE 1)		t_{rr}	35	ns
Typical junction capacitance (NOTE 2)		C_J	140	pF
Typical Thermal Resistance Junction to Ambient (NOTE3)		$R_{\theta JA}$	55	℃/W
Typical Thermal Resistance Junction to Lead (NOTE3)		$R_{\theta JL}$	15	℃/W
Operating Temperature Range		T_J	-55 to 150	℃
Storage Temperature Range		T_{STG}	-55 to 150	℃

Note1: Reverse recovery condition IF=0.5A,IR=1.0A,Irr=0.25A

Note2: Measured at 1MHz and applied reverse voltage of 4.0V DC.

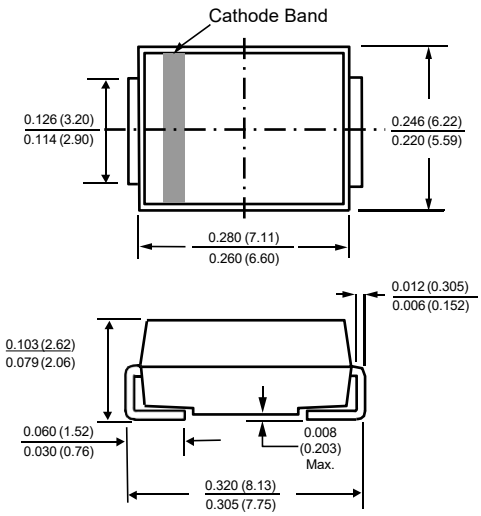
Note3: PCB. mounted with 5×5mm copper pad areas

Revised:2.1,Oct-22

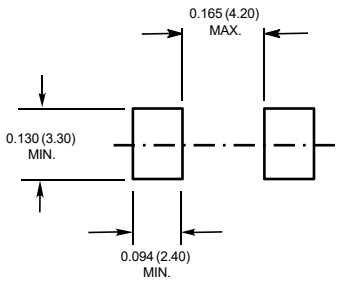
Package Outline Dimensions in inches (millimeters)

CASE:0103

SMC (DO-214AB)



Mounting Pad Layout



Part Marking System

PDW:Company Logo

XX:Marking Code

Cathode Band
(for uni-directional products only)

Summary of Packing Options

Package	Packing Description	Packing Quantity
SMC	Tape/Reel,13" reel	3000